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## ABSTRACT

This publication on science education programs is the second in a three-part series of reports that summarizes the results of the Association of Science-Technology Centers' (ASTC) Science Center Survey, conducted among nearly 200 science museums and science centers in 1987. Reports on exhibits and on administration and finance comprise the rest of the series. Major topics included are: (1) "History of the ASTC Science Center Project"; (2) "Science Education Programs Today"; (3) "Kinds of Programs Offered by Science Centers"; (4) "What It Takes to Run a Programs Department"; (5) "What Is a Successful Education Program"; and (6) "Future Audiences for Science Center Programs." Footnotes and bibliography, survey questionnaire, respondents to this survey, and an education program directory are also provided. (YP)

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# The ASTC Science Center Survey

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# Education Report

EDUCATION

## Table of Contents

Acknowledgments	iv
History of the ASTC Science Center Project	v
Foreword	vi
Introduction	vi
Science education programs today	1
Kinds of programs offered by science centers	3
What it takes to run a programs department	10
What is a successful education program?	13
Future audiences for science center programs	15
Appendices:	
A. Footnotes and bibliography	17
B. Copy of education questionnaire and related questions from other sections of survey	18
C. Respondents to ASTC Science Center Survey	31
D. Directory (under separate cover)	



iii

## Acknowledgments

The ASTC Science Center Survey project could never have happened—our three-report series and database would not exist—if it weren't for the dedication and diligence of our members. In April 1987, we mailed out a four-part questionnaire to nearly 200 science museums and centers, asking for information on exhibits, education programs, and administration, and finances. Seventy percent of ASTC members (125) and six nonmembers spent several days of their valuable staff time filling out the detailed forms, and giving thoughtful answers when we asked their opinions.

Thanks to everyone who contributed, ASTC is endowed with a wealth of information, part of which is being shared through this report.

ASTC deeply appreciates the support of the National Science Foundation. We especially thank Michael Templeton, Informal Science Education Program Director, and Elizabeth Martin, who was Program Director when our project began. In addition, we would like to thank George Tressel, former NSF Division Director of Materials Development, Research and Informal Science Education, for his encouragement and support.

As chairman of the ASTC Publications Committee during 1986 and 1987, Dr. Dennis Wint proved to be a steadfast supporter of the project; we appreciate the efforts he made to increase the number of surveys returned. In fact, members of the 1987 Publications Committee volunteered to phone other museum staff members to ensure that surveys were completed and returned.

ASTC is also grateful to the NSF Survey Advisory Committee, which met during the summer of 1986 to determine the focus and content of the survey, and on whom we called for advice in further shaping of the document and of the reports.

The Committee was comprised of Dr. Kay Davis, Dr. Thomas Krakauer, Charles O'Connor, David Taylor, and Dr. David Ucko (who also provided guidance in his role as Co-

Chairman of the 1988 Publications Committee.)

To devise the questionnaire, we called on many museum professionals for guidance and advice. The American Association of Museums was kind enough to let us borrow questions and ideas from the Museum Assessment Program questionnaire.

The Center for Urban Studies at Wayne State University mailed the surveys for us, made follow-up phone calls, and kept track of the returns, a process that entailed assigning an identification number to every scrap of paper and photograph submitted. In particular, they deserve many thanks for completing the arduous chore of logging in—and then doublechecking—thousands of responses.

We especially appreciate the invaluable help provided by Don Dilin, our computer consultant, in computing and analyzing the data as well as the many helpful suggestions he made throughout the project.

I would like to thank Susan McCormick, Publications Coordinator, for her outstanding job of editing the survey reports as well as coordinating their production.



Bonnie VanDorn  
Executive Director

November 14, 1988



Courtesy of California Museum of Science and Industry, Los Angeles, California



## History of the ASTC Science Center Project

The ASTC Science Center Survey project began in 1986, when the National Science Foundation awarded ASTC a grant to conduct a survey of the science center field to satisfy a growing demand among members and funders for up-to-date statistics about attendance, admission fees, education programs, and exhibits. The purpose of the survey was to enable ASTC to collect and publish data on science center administration and finance, education programs, and exhibits, to set up a databank, and to set directions for the future.

In the late 1970s, ASTC had conducted a similar but less comprehensive international survey, the results of which were reported in the 1980 publication, *Exploring Science. A Guide to Contemporary Sci-*

*ence and Technology Museums.* Because the field has grown rapidly, ASTC members are again in need of statistics by which they can measure their own progress and get a sense of where the profession is headed.

ASTC initially selected 200 science centers and museums to invite to participate in the survey, primarily those that use participatory exhibits to explore the physical sciences, life and natural sciences, and technology. All of ASTC's museum members (165) were invited, including developing institutions not yet open to the public. An additional 35 nonmember institutions whose missions were considered compatible with ASTC members were selected.

The resulting list of 200 institu-

tions was composed of about 53 percent science and technology centers, 11 percent natural history museums, 11 percent general museums, 8 percent developing museums of all kinds, 7 percent children's museums, 2 percent nature centers, 2 percent aerospace museums, 2 percent botanical gardens, and 4 percent miscellaneous.

In late January 1987, ASTC tried out the survey on 11 science centers which had agreed to complete the questionnaire in advance to provide us with suggestions on how to improve it. The survey was revised accordingly and in late April, ASTC mailed the Science Center Survey (via Wayne State University) to a total of 187 institutions, 167 members and 20 nonmembers. Of these, 38 were located outside of the United States. By the end of August, ASTC had received completed or partially completed questionnaires from 131 institutions. There was an overall response rate of 70 percent to the survey—76 percent in the U.S. and 47 percent outside the country.

From August through November, the responses were logged in and tallied at the Center for Urban Studies in Detroit, Michigan; and in December, ASTC was shipped the entire collection of materials and questionnaires for reference and storage.

In February, we published the highlights of our preliminary findings, which ASTC Executive Director Bonnie VanDorn presented at an American Association for the Advancement of Science symposium.

The report series is being published in 1988 and early 1989. We are already starting to consider how best to keep the databank updated.



Courtesy of Chicago Academy of Sciences, Chicago, Illinois

## Foreword

This report profiles science center education programs today. What kinds of programs are offered, and whom are they intended to attract? Which are most successful, and why? It is based primarily on 123 responses to the Educational Programs section of the 1987 ASTC Science Center Survey.

In addition to describing the current state of the field, the report provides an overview of the staff, facilities, and budget needed to run a programs department. It looks at the programs currently being offered by the respondent institutions and, at the end, provides a directory of 418 education programs of-

fered at 123 science centers in the U.S. and abroad.

You should be able to find out which museums have camp-in programs and which have programs for preschoolers, the number and kinds of services and facilities that science centers offer schools, and how many school personnel work at science centers and in what capacities.

Most of the respondents to this section of the survey (97 of 123) are located in the United States. While it is possible to characterize similarities and differences of science centers worldwide, generalizations can be made only about centers in this country.

This is the second time ASTC has conducted a survey on education programs. The first, conducted in 1976 by Dr. Kay Davis, was distributed to ASTC's museum membership which then totaled 65, resulting in 28 respondents. Because of the small 1976 sample, it is not useful as a comparison to the present data, especially considering that the data published in 1976 was selected to represent the average-sized science center. According to the *Survey of Education Programs at Science-Technology Centers*, "the very large and very small museums which would have distorted the statistical results were excluded."<sup>1</sup>

## Introduction

As educational institutions, science centers have two major functions: to further science education for the general public and to supplement the science teaching of schools.<sup>2</sup> Science centers offer a rich diversity of education programs. There is something for everybody, from preschoolers to senior citizens. Not only are science centers as a whole responsible for a wealth of activities, workshops, tours, and field trips, but each science center offers its own community an impressive range of programs for a variety of audiences.

Nine out of ten science centers plan educational programs jointly with schools. Science center education staff work closely with classroom teachers to tailor tours and programs to school curricula; some school districts pay for the students' transportation, lunch, and admission fees. Clearly, science center education programs are in demand by schools and by communities that need a range of services, from day care, after school, and summer programs, to enrichment programs and tours for families and adults, to camp-ins and career workshops.

In 1986, museum programs conducted for schools reached 9.6 million students. Outreach programs alone—including self-explanatory materials sent to schools as well as visits from museum staff—served

3.2 million students in the U.S. and a half million in other countries.

School programs held at science centers served 4.6 million students in the U.S. and 1.3 million in other countries.



Courtesy of Virginia Living Museum, Newport News, Virginia



## Science education programs today

Science museums, whenever possible, should offer a full range of activities and opportunities to pursue science hobbies, teacher-training programs, weekend and evening programs for parents and children, and opportunities for "hands-on" experience to complement the stimulus and background experience provided by television and reading.<sup>3</sup>

Science centers offer a wide range of programs, from summer day camps, field trips, and science fairs to explainer programs, teacher workshops, and classes for preschoolers and families. The survey asked respondents to list up to five education programs, choosing "those that in your professional judgment are most successful and would be of most interest to your colleagues at other science centers."

### Target audiences

In addition to listing and describing model programs (see Appendix D), survey respondents were asked what kinds of programs they offered to specific audiences.

As might be expected, the highest numbers in the program audience table occurred in the "serves all groups" category. 97 science centers reported offering special events; 89 offered lectures and demonstrations; and 72 offered films/shows.

The results show that science centers are ambitious in their efforts to serve many audiences with a variety of targeted programs. Overall, the audience most frequently served was children in elementary school, followed by junior high and high school students, while the least number of programs reported were targeted specifically for disabled audiences, followed by minority groups and females.

The number of programs for university students was low, with the exception of 63 internship pro-

Figure 1. Number of Entries under Major Themes

Major Themes	Number of Entries	Major Themes	Number of Entries
General Science	111	Astronomy	23
Natural History, Life Sciences	12	Space research and exploration	15
Ecology	31	Solar system	12
Biology	13	Stars and star clusters	9
Zoology	10	Education	29
Botany	9	Chemistry	16
Evolution	1	Social Sciences Anthropology	14
Live Animals	2	Archeology	8
Physics, General	38	Social Sciences History, Miscellaneous	12
Electricity and magnetism	18	Human evolution	4
Optics	8	Psychology	1
Mechanics	7	Technology	1
Acoustics, vibrations	5	Computers	11
Heat, thermodynamics	4	Communications	4
Fluid mechanics	1	Power production	2
Medicine Systems of the Body	23	Materials and processes	2
Medicine and Health	5	Lasers	1
Fitness and personal health	8	Civil engineering and architecture	1
General and miscellaneous	3	Scientific Method and Process	19
Nutrition	3	Mathematics	16
Heart, Cardiovascular System	2	Careers in science	8
Dental Health	1	Food, Agriculture, Forestry	4
Environmental Health and Safety	1	No theme assigned	62
Earth Sciences	13	Other	50
Geology	12	Total =	712
Paleontology	8		
Dinosaurs	1		
Geography	4		
Meteorology	4		



1

grams, the highest number of programs for any one special audience listed in the table. A total of 62 science centers reported offering classes and workshops for elementary school students.

Respondents were invited to describe any other education programs that were not covered by the table ASTC provided. In addition to teacher workshops and in-service training, survey respondents also listed summer camps (8), science fairs (7), outreach programs (6), competitions (5), explainer programs (4), and volunteer/docent programs (4). Other programs mentioned were vocational training, training for community agencies, early childhood education centers, and elderhostels for senior citizens.

Of the 712 entries, the topics appearing most frequently were general science (111) and life sciences (108). The third major category was physics (81), followed by medicine

and health (46), earth sciences (43), and astronomy (36).

These model programs were aimed at a variety of audiences, but the audiences that appeared most frequently were teachers (55) and elementary school students (54).

Figure 2. Audiences for Model Programs

Audience	Number of Programs
Teachers	55
Elementary School Students	51
High School Students	23
Preschoolers/Kindergarteners	16
Families	14
University Students	7
Junior High Students	6
Females	6
Adults	5
Disabled	5
Senior Citizens	4
Minorities	3
Low-Income	2
N = 110 institutions	

Figure 3. Total Number of Programs Offered to Audiences at Science Centers in the U.S. and Abroad

Program	Preschoolers Kindergarteners	Elementary School Students	Junior High School Students	High School Students	University Students	Senior Citizens	Disabled	Minority Groups	Females	Serves All Groups
Camp-in Programs	4	16	29	18	4	2	6	12	20	2
Classes, Workshops	44	62	52	32	19	21	20	18	20	50
Field Trips, Studies	14	33	28	25	12	21	11	13	10	34
Films, Shows	3	8	9	8	6	6	5	5	5	72
Guided Tours	10	16	13	11	5	7	10	4	6	64
Internships	4	3	4	37	63	8	3	10	9	5
Demonstrations, Lectures	9	19	22	22	13	13	13	13	12	89
Performing Arts	8	9	6	5	4	4	7	7	4	44
Planetarium Programs	2	7	7	7	3	3	4	3	3	54
Radio, TV Programs	2	8	5	2	0	1	1	3	2	31
Science Clubs	1	24	23	17	4	2	1	5	4	9
Speaker's Bureau Programs	1	2	2	2	3	4	2	2	2	41
Special Events	7	11	8	7	6	7	6	6	6	97
Tours/Travel Programs	0	4	8	10	10	16	7	8	8	35

N = 123

Figure 4. A Comparison of Programs Listed in Figure 3 to Those Listed as Model Programs in the Directory

Kind of Program	Number of Programs Reported in Figure 3	Number of Programs Reported in Directory
Demonstrations/Lectures	114	35
Classes and Workshops	112	163
Special Events	109	28
Guided Tours	84	33
Films, Space Theater Shows	79	4
Field Trips, Studies	79	19
Intern Programs	78	10
Planetarium Programs	61	8
Performing Arts	55	7
Camp-in Programs	54	14
Tours/Travel Programs	54	1
Speaker's Bureau	46	0
Science Clubs	43	5
Radio/TV Programs	39	2
*Outreach		39
*Career Workshops		6
*Explainers		5
*Teacher Training		39
*Total	1,007	418

\* The categories listed below the line were created for programs in the directory that did not fall under any of the headings provided in Figure 3.

Judging by the education program directory (see Appendix D), the programs deemed by survey respondents to be most successful are classes and workshops, followed by demonstrations. Radio and TV programs were mentioned least often.



Courtesy of The Brooklyn Children's Museum, Brooklyn, New York



## Kinds of programs offered at science centers

### Demonstrations/Lectures

Aside from exhibits, the most frequently used method of interpretation at science centers is demonstrations, a method pioneered by the Deutsches Museum in Munich more than 40 years ago. About 93 percent of the respondents reported offering demonstrations and lectures, mostly the former.

Most demonstrations last from 15 to 30 minutes, and are usually presented several times a day by volunteers, education staff members, and explainers. Many are trained in safety procedures to protect themselves and the audience.

The purpose is to show the public how something looks or how something is done, as in the cow's

eye dissection at the Exploratorium, during which visitors are free to interject questions, or the Science Museum of Virginia's demonstration of magnetic levitation during its Science Circus activities.

In Chicago, the Museum of Science and Industry makes use of exhibit areas and theaters in presenting five regular and 15 requested demonstrations in such fields as chemistry, physics, electricity, biology, simple machines, and the electromagnetic spectrum. The Palais de la Decouverte in Paris has one of the most extensive demonstration programs, with a demonstration counter in nearly every exhibit hall. In Munich, the Deutsches Museum has built a number of minitheaters adjacent to new exhibits for demonstration purposes.<sup>4</sup>

Respondents reported a total of 114 programs in the demonstrations/lectures category. Of the 35 model programs listed under this category in the directory, 10 are lecture programs.

### Classes and Workshops

This broad category (163 entries, more than a quarter of the entire directory) encompasses a wealth of science center educational offerings, including summer camps and enrichment programs. Classes and workshops are offered on almost any topic you can imagine. A sampling of topics covered in classes and workshops includes aerospace, animals, archeology, architecture, art, astronomy, chemistry, culture, history, dental health, human repro-



duction, mathematics, photography, robotics, sign language instruction, and science fair projects.

Virtually all classes and workshops offered by science centers are hands-on, and many are of the "make it and take it home" variety. In winter 1987, for example, the Science Center of Iowa offered a holography workshop in which participants could learn about laser technology and each make their own hologram to take home. The workshop was concurrent with a temporary holography exhibition at the museum.

## Special Events

A total of 89 percent of respondents reported offering special events, the directory lists 28 as model programs. Special events is a catch-all category for programs that are not offered as daily fare. Some are annual events, while others are one-time-only occasions or celebrations. Special events are held to raise funds, generate publicity, gain support from the community on a

particular issue, or to inform the public. Typical special events are science fairs, art, photography, and other competitions, auctions, "super science weekends," usually consisting of continuous science activities and programs, solar eclipse and solstice parties, and days celebrating particular cultures, such as the Annual Alabama Indian Festival and Cultural Focus Days at The Children's Museum of Indianapolis.

## Guided Tours

Sixty-nine percent of respondents said they offer guided tours of the museum or of particular exhibit halls. A total of 33 guided tours were listed as model programs, representing many alternatives to the standard follow-the-docent museum tour. Science center tours today contain opportunities for visitors to interact with objects and exhibits, and give them the freedom to explore at their own pace, pursuing their own interests.

The Reuben H. Fleet Space Theater and Science Center offers be-

hind-the-scenes observatory tours led by an astronomer for a general audience, providing visitors with a view of the night sky through a 60-inch telescope. The Schiele Museum of Natural History in North Carolina offers an interpretive tour of a replicated Catawba Indian site. Nearly 12 percent of the respondents said they offered tours specially designed for people with disabilities.

Several museums said that a strong point of their tour programs was close interaction with a docent, remarking that the fewer children per docent, the more valuable the experience. Not all science centers use docents, however; many tours are self-guided. For example, the Franklin Institute offers a self-guided tour called "Energy for the Fifth Grade" that includes an auditorium show.

More than half of all tour programs are intended for school groups, many respondents expressed a willingness to adapt tours to teachers' needs. Museums also work with community agencies. In "After School Adventures" at the



Courtesy of California Academy of Sciences, San Francisco, California

Brooklyn Children's Museum, children from latch-key centers make four visits to the museum based on a theme introduced through pre-visit workbooks.

Some programs use artifacts or objects to enhance the tour. A program at the Oakland Museum gives each child a "discovery pack" containing touchable objects to use in conjunction with their tour of the natural science gallery, while the Kansas City Museum's "Please Touch" program invites students to handle artifacts and reproductions in four exhibit areas. Like several other science museums, the Thames Science Center in Connecticut provides students with workbooks to tour exhibits and hands-on activities.

### Space Theater Shows, Films

Although space theaters have been in existence for less than 20 years, they have been a major influence on attendance figures at science museums. Along with steeply pitched seating, space theaters have sophisticated equipment that makes the viewer feel part of the film—a six track sound system and a special projector that creates an image on a giant screen up to seven stories high. The audience for space theaters and films seems to be spread fairly evenly across all ages, with a slightly higher concentration in elementary, junior high, and high school students. A total of 79 respondents reported offering films or space theater programs. The four programs listed as models in the directory, though, are all standard films, not the space theater variety.

The educational value of space theaters is sometimes questioned but, like robotic dinosaurs, they have the undeniable power to attract audiences—comprised of many who perhaps would not otherwise visit a science museum.

### Field Trips, Field Studies

Field trips and field study programs present rare opportunities to work with artifacts, explore nature first-hand, and to work side by side with scientists, giving students a sense of what is entailed in pursuing a career in the natural sciences. The main audiences for these pro-

grams are elementary school, junior

high, and high school students.

A total of 79 field trips and studies programs were reported, 19 such programs are listed in the directory.

The Museum of the Rockies in Montana, for example, offers students the opportunity to work with professionals performing natural history field work, and the Milwaukee Public Museum operates "Archaeological Rescue," a program in which students participate in all phases of archeological work, including analysis and lab work. The New Jersey State Museum offers college credit for its "South Dakota Field Experience," a field course on paleontological techniques.

Although natural history museums might be expected to offer the majority of such experiences, science centers offer interesting opportunities for students as well.

A pioneer in offering camp programs, the Oregon Museum of Science and Industry (OMSI) in Portland has owned and operated an environmental education center, Hancock Field Station, for more than 30 years. A typical OMSI-sponsored weekend adventure at Hancock recently included canoeing on a river, horse-drawn buggy and wagon rides, fossil collecting, and introductory rock climbing. OMSI also operates a Pacific Marine Science Camp on site at Camp Kiwanilong.



Courtesy of Schiele Museum of Natural History, Gastonia, North Carolina

The Science Museum of Virginia operates canoe trips to observe wildlife and explore geology, while the Pacific Science Center presents a variety of camps on general science, whales, and sailing. The Science Center of New Hampshire offers "The Floating Classroom," a limnology course for junior and senior high school students.

A teacher-training course in field zoology that includes lab and field experience is offered by the Virginia Living Museum in Newport News. Some field trip programs were reported as especially designed for disabled audiences. For instance, The Chicago Academy of Sciences operates a bird-watching program for the visually impaired.

## Internships

The majority of intern programs are intended for university students, with half as many programs aimed at high school students and relatively small numbers for other groups.

A total of 78 museums reported offering internships, with 10 listed as model programs in the directory.

Internships are programs in which a student (or sometimes a teacher) works at a museum for a length of time to gain skills in a particular area. At Omniplex in Oklahoma City, high school students earn academic credit for working as an intern in the "Museum Apprentice Program." The Natural Science Center of Greensboro has a similar program for college students. A "University Study Practicum" program at The Children's Museum of Indianapolis offers students the opportunity to teach in a museum environment. For practicing teachers, the Lawrence Hall of Science, Berkeley, offers a month-long residential institute for math and science teachers.

Internships offer high school students an excellent way to gain exposure to science in a motivating environment, working with science museum professionals. For teachers, a museum internship presents a wonderful opportunity to become comfortable with and learn about science in an informal environment, and to re-experience the sheer joy of learning.

## Planetarium Programs

A total of 61 science centers reported offering planetarium programs, including some outreach programs in inflatable planetariums. Most of the programs are intended for elementary, junior high, and high school audiences. These programs typically acquaint students with features of the night sky, sometimes providing the mythology behind the most prominent constellations. The Kalamazoo Public Museum's "Exploring the Solar System" program is more ambitious, introducing concepts of distance, motion, size, and atmosphere. As part of the New York Hall of Science's Starlab rental program (listed among seven other model programs in the directory), teachers are trained to use the portable planetarium equipment before renting it.

## Performing Arts

Puppetry, skits, storytelling, mime, music, comedy, dance, and formal theater are some of the avenues science centers have taken to weave the dramatic arts into the informal learning that takes place at science centers. These performances can range from a 10-minute monologue by "Madame Curie" to a formal stage presentation, such as Kurt Vonnegut, Jr.'s one-act play, "Fortitude," which explores ethical issues in medical technology. (Both of these performances were offered

by the Science Museum of Minnesota.)

Survey respondents reported a total of 55 performing arts programs, mostly for elementary school students and preschoolers. Seven performing arts programs are listed as models in the directory. These programs range from a tour at the Chicago Botanic Garden led by an actor portraying Carl Linnaeus, to the New Jersey State Museum's Dino Safari, a stage presentation of a time machine journey into the world of dinosaurs.

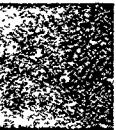
The Science Museum of Minnesota, a pioneer in the use of performing arts in museum education, conducts a rich variety of theater presentations, many of which are part of the educational framework of the Museum's anthropology hall. As Sondra Quinn said in *A Stage for Science*, "We discovered that through theater, the audience can become closer to the creator of the artifact, to the user, the collector, the purpose of the artifact, and to themselves."

## Camp-in programs

In 1972, Ohio's Center of Science and Industry (COSI) in Columbus created the camp-in program as an alternative for Girl Scouts and Campfire Girls who wanted to go camping during the winter. COSI came up with a program that invited the Girl Scouts and Campfire Girls to "camp out" in sleeping bags on the museum floor, following a



Courtesy of Franklin Institute Science Museum, Philadelphia, Pennsylvania



7

Courtesy of Science Museum of Minnesota, St. Paul, Minnesota

program of science activities and a pizza party. The next morning, the girls were treated to an early breakfast before returning home. The camp-in quickly became a huge success, one that many museums wanted to offer their own communities.

In 1983, ASTC sponsored a camp-in workshop hosted by COSI that gave more than a dozen science museum professionals first-hand experience in how to run a camp-in—including spending the night sleeping on the floor with hundreds of Girl Scouts. A 1985 article in the *ASTC Newsletter* estimated that there were more than a dozen camp-in programs in operation nationwide, each with its own style and specialities. Just two years later, responses to this survey indicate a total of 54 camp-in programs, with 14 cited as model programs.

The majority of camp-ins (46) are intended for elementary school children, the second most common au-

dience (29) is junior high school students, followed by females (20). Other audiences are being reached as well. "Snore with a Dinosaur" at the Museum of History and Science, Louisville, is for the whole family, and in the past two years, the Franklin Institute Science Museum, Philadelphia, and the Museum of Science, Boston, have successfully launched camp-ins for teachers.

#### Tours/Travel Programs

According to survey respondents, this is the only type of program for which senior citizens are the largest target audience, followed by high school and university students. None are offered to preschoolers. Of the 54 tour and travel programs reported, only one such program (a walking tour of Kalamazoo) is listed as a model. As demographics change, more of these programs may be offered to attract more senior citizens.

#### Speaker's Bureau

A total of 46 speaker's bureau programs were reported, with senior citizens as the biggest audience for them. None were listed as model programs in the directory.

#### Science Clubs

A total of 43 survey respondents reported offering science clubs, the majority of which are offered to elementary and junior high school students, with clubs for high school students a close runner up. Five were selected as model programs, including science handicraft and astronomy clubs at the Nagoya Municipal Museum in Japan and a Young Astronauts Program chapter at the Buhl Science Center in Pittsburgh, Pennsylvania.

## Radio/TV Programs

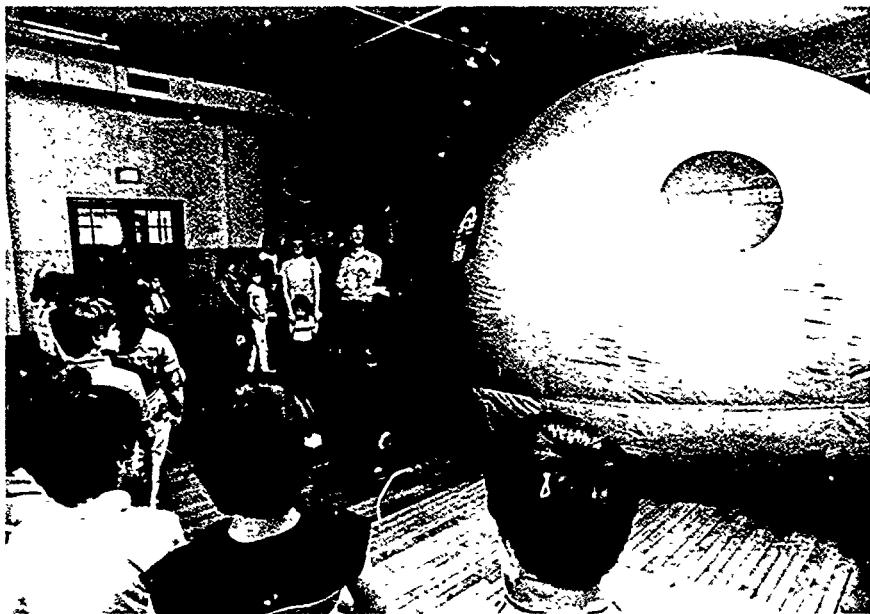
Most of the radio or television programs reported were geared to an elementary school audience, although nearly as many were intended for junior high school students; university students were not considered a target audience for any of the broadcasts. Although 39 museums reported offering such programs, only two were cited as model programs, a morning television program at the Natural Science Center of Greensboro in North Carolina and a monthly half-hour radio program offered by the Vermont Institute of Natural Science.

## Outreach Services and Materials

Of the 5.9 million students served by science centers in the U.S. and abroad in 1986, 3.7 million were served through outreach programs. In the U.S. alone, 3.2 million students were served through outreach programs.

Community or statewide outreach services are offered by most U.S. science centers as a way to reach people who are unable to visit museums, or who perhaps would not visit on their own. A wide range of services exists, educational publications, such as the Science Museum of Minnesota's *Bug Hopper* and *Cranberry Creeper* newsletters for teachers and students respectively, audiovisual materials, science demonstrations, traveling exhibits, and in-service teacher programs. Many science centers make it possible for schools to borrow exhibits and artifacts. Others, such as the Missouri Botanical Garden, offer free information on horticulture over the telephone, the Bell Museum of Natural History offers a similar service on the subject of wildlife.

A total of 39 outreach programs are listed in the directory as model programs. Some of these are vans that travel to schools, bringing exhibits, demonstrations, and activities: Indiana State Museum's Reach Bus, Science World's Roadshows in British Columbia, and Insights—El Paso Science Center's Van-in-Sight program, for example. The Bell Museum of Natural History takes its programs to the local children's hospital. Sacramento Science Center operates "TOPS" (Traveling One



Courtesy of Buhl Science Center, Pittsburgh, Pennsylvania

Person Show) while Midland Center for the Arts offers "Discovery! in a Suitcase." In fact, many refer to outreach programs as "suitcase science." The Anniston Museum of Natural History in Alabama calls their outreach program "Traveling Trunk."

In Great Britain, a large tent filled with hands-on science exhibits called The Discovery Dome reached more than 100,000 visitors in just five months in 1988, many of whom had never seen a hands-on science exhibit before. The National Council of Science Museums in India has a network of outreach services including vans that take science to remote parts of the country. In 1987, these mobile science exhibitions served 1,632,377 youngsters in India.<sup>6</sup>

## Explainers

Five explainer programs were reported as models for the directory, but many more are in operation. Explainers are high school or university students who are paid to explain exhibits on the floor and answer the public's questions. Nearly 20 years ago, Frank Oppenheimer, founder of the Exploratorium, came up with the idea and since then, the Exploratorium has hired more than 900 teenagers to serve the museum in this role. The Exploratory in Bristol, England, operates an explainer program as well, calling their explainers "pilots."

A study conducted by Judy Diamond, Mark St. John, Beth Cleary, and Darlene Librero to examine the long-term effect of the explainer



Courtesy of California Academy of Sciences, San Francisco, California

program on teenagers found that "the brief experience of working as an explainer can substantially affect the teenagers' later lives."

## Career Workshops

To encourage young people to pursue careers in science, mathematics, and engineering, many science centers offer career days and workshops to help students explore the possibilities, often giving them the opportunity to meet professionals in scientific fields. For example, The Red Mountain Museum in Birmingham, Alabama, sponsors a Science Career Day for elementary, junior high, and high school students.

Of the six career programs listed in the directory, two are geared to minority audiences. MESA (Math, Engineering, Science Achievement) at the Lawrence Hall of Science and CPEP (Connecticut Pre-Engineering Program) at the Science Museum of Connecticut. One is intended for females: the Detroit Science Center's Careers in Science for Women.

## Teacher-Training Programs

Survey respondents reported that in 1986 alone, teacher-training programs served 47,000 U.S. teachers, and 18,000 teachers in countries outside of the U.S. Over the past several years, teacher-training programs have become a standard offering at science centers. A total of 100 centers now conduct teacher-training workshops, an increase from the spring of 1984, when an ASTC survey conducted among 99 institutions found that 33 offered teacher education programs. This, in large part, is due to ASTC's Science Teacher Education at Museums program (STEAM), funded by the General Electric Foundation.

From 1984-88, more than \$417,013 in STEAM grants was awarded to 46 museums to develop and expand teacher-training programs. As a result of STEAM, more institutions offer teacher-training programs, more programs are offered at each institution, and the programs are serving more teachers.

Teachers report that museum-

based programs improve the quality of science education in their classrooms. According to an internal ASTC study, STEAM grantees cite an increase in the hours spent teaching science in the classroom, and an improvement in the quality of science education through use of more interactive and participatory instruction. Teachers have a more positive attitude toward science, and feel more confident about teaching it.

Many of the reasons for the success of teacher-training programs at science centers are explained in Mark St. John's assessment of The Exploratorium Teacher Institute.

- 1) The Exploratorium is a neutral arena.
- 2) It is a meeting ground for high-quality science and education.
- 3) The Institute addresses the professional needs of the participants.
- 4) A long-term relationship [between the teacher and the museum] is developed.
- 5) The Exploratorium offers a clear vision of science education.<sup>9</sup>

According to Ted Ansbacher of the Museum of Science and Industry, Chicago, there are three reasons behind the enthusiastic reception of the science museum in teacher education.

1. There is a great need for better trained science teachers in elementary and secondary schools.
2. The university education departments are having a difficult time, due to lack of students, maintaining their programs in the area of science teaching.
3. The science museum, with its emphasis on inquiry-oriented learning, has just the resources and expertise to implement the needed courses for teachers.<sup>10</sup>



Courtesy of the Exploratorium, San Francisco, California



## What it takes to run an education department

### Facilities

On the average, 8.4 percent of the total public space at science centers (398,000 of 4,735,000 square feet) is allocated to education facilities, not including planetarium/theater areas. U.S. science centers average about 4,624 square feet for education programs, or about 10 percent of total public space.

Less space was devoted to programs in centers outside the U.S. that responded to the survey—an average of 95,029 square feet of a

total of 2,599,503 square feet, or 3.6 percent. Space for education programs varied from the largest reported—17,345 square feet at the Singapore Science Centre—to 500 square feet at the Dutch Institute of Industry and Technology.

In the U.S., education facilities ranged from 21,400 square feet at the Chicago Botanic Garden to 125 square feet at the Bradbury Science Museum in Los Alamos. The average amount of space allocated to planetariums and theaters at U.S. science centers was 5,705 square

feet. There were too few responses from museums outside the U.S. to arrive at a meaningful average.

Other educational facilities mentioned by respondents included theaters and demonstration areas (15), auditoriums (4), workshop centers (2), planetariums (3), exhibit halls (2), and observatories (2). Respondents also listed aquariums, heliostats, large lecture rooms, a nature sanctuary with shelter, a Raptor Center and outside grounds for teaching, an ecology garden (including an ecology laboratory and reference center), a ham-radio training/science hobby center, an Indian Room, and a library/school orientation center.

Nearly 76 percent of U.S. science centers have classrooms on the premises as part of their educational facilities, and 63 percent have either a library or a resource center. Only about 27 percent of U.S. respondents said they have computer labs, compared to 67 percent of respondents outside the U.S. However, the sample for respondents outside the U.S. is much smaller, making it difficult to draw conclusions based on comparisons.

### Working with Schools

Most science centers (88 percent) plan educational programs jointly with school personnel. More than half of the survey respondents (57 percent) reported having an education advisory committee.

Listings under other types of educational programs (last item on bar graph) included pre-visit planning sessions for teachers, curriculum development as a collaborative effort, teacher open houses, in-service seminars, school group camp-ins, contests, family workshops, math workshops for girls, and an "Adopt a School" program.

Figure 5. Space Allocated to Education Programs at Responding U.S. Science Centers

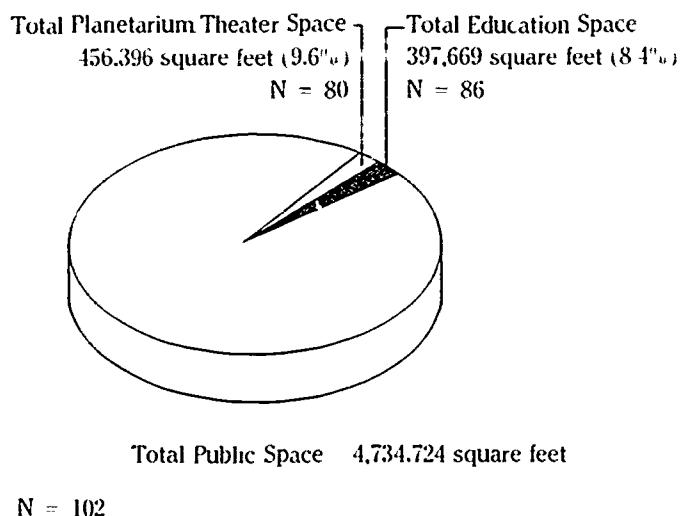


Figure 6. Number of Science Centers Offering Educational Facilities

Facility	Number of Museums	
	U.S.	Non-U.S.
Classrooms	82	9
Preschool Areas	32	4
Library and/or Resource Center	68	12
Computer Lab	29	10
Labs Other than Computer	30	6
Discovery Room	37	7
Other Educational Facilities	36	4



Courtesy of Ontario Science Centre, Don Mills, Ontario

Figure 7. Proportion of Science Centers That Have School Personnel Working in Various Capacities

Function	U.S.		Non-U.S.	
	Percent	N*	Percent	N*
Education Program Planning	69%	100	57%	14
Conducting Education Programs	58%	96	38%	13
Exhibit Development	25%	92	29%	14
On Loan or Leave to Work at the Museum	23%	93	31%	13

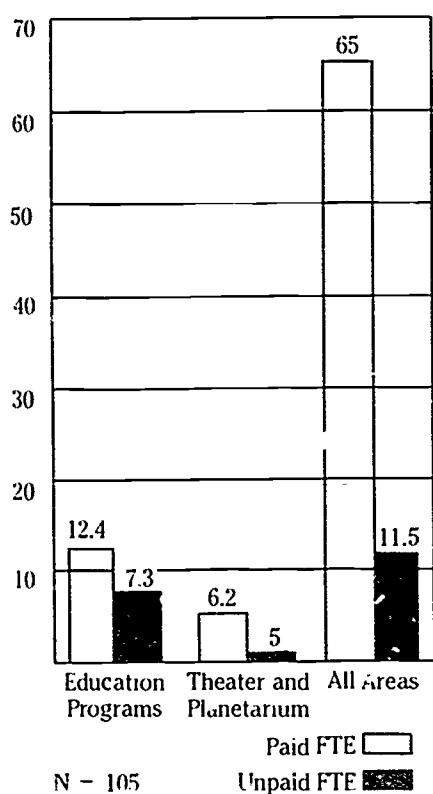
\*N = The number of science centers responding to each question

Figure 8. Percentage of Science Centers Offering Services to Schools

103	Museum tours/class visits for school groups	97%
98	Classes or demonstrations at the museum	92%
88	Teacher workshops	83%
81	Curriculum materials, kits, and software	66%
76	Classes or demonstrations at schools	72%
61	Loan of a/v materials, exhibits, or artifacts	58%
48	Science fairs	45%
30	Career workshops	28%
19	Other	18%

N = 106

**Figure 9. Average Number of Paid and Unpaid FTEs (Full-Time Equivalency) in Science Center Education Departments in the U.S.**



## Personnel

On the average, 19 percent of centers' paid full-time and part-time equivalent staff were assigned to education programs in 1986. In the U.S., an average of 9.5 percent of paid staff are employed in the theater and planetarium area.

In 1986, about 53 percent of all volunteers (8,611) working at responding U.S. science centers were assigned to education departments. The median number of volunteers working in education departments was 23 (the median total for all departments is 43). We have used the median instead of the mean because it is a better indicator of common practice in this instance, where there are large volunteer forces at a few museums. The California Museum of Science and Industry, for example, reported 680 volunteers, 620 of whom work in the education department.

A total of 35 U.S. centers (32 percent of respondents) reported receiving donated education program teaching support services from outside organizations. Presumably, many are from school districts, this would include school district-em-



Courtesy of Cleveland Health Education Museum, Cleveland, Ohio

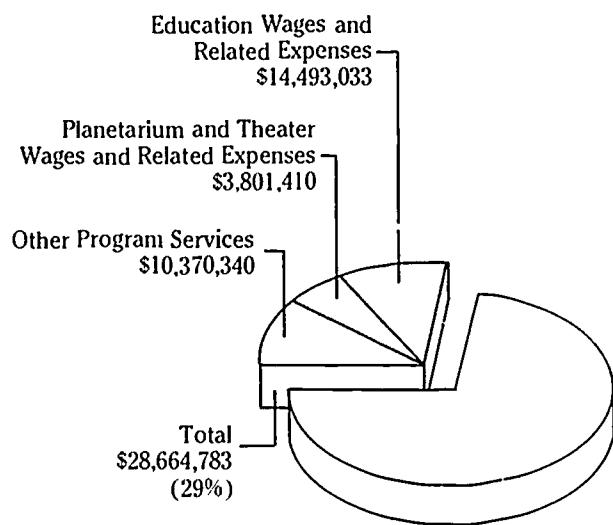
ployed teachers who are assigned to work in the museum.

## Wages, Operating Expenses, and Revenue

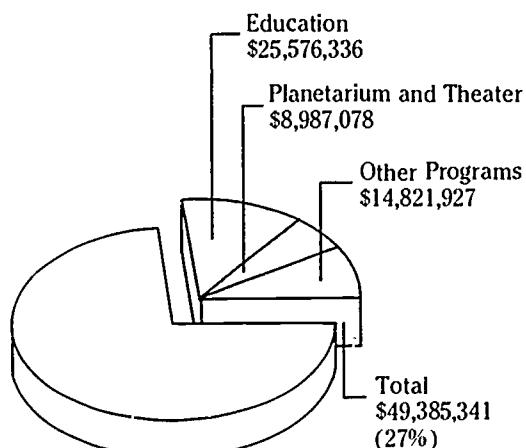
Education program expenses, including wages and benefits, accounted for 14 percent (\$25,576,336 of \$186,284,112) of the average total operating expense budget for U.S. survey respondents in 1986. Fourteen percent of total wages and benefits was devoted to education programs in 1986—a total of nearly \$14,500,000.

**Figure 10. Wages (Including Related Expenses) and Operating Expenses Allocated to Education and Other Programs at Responding U.S. Science Centers**

a. Wages and Related Expenses Allocated to Education and Other Programs



b. Total Operating Expenses (Including Wages and Benefits) Allocated to Education and Other Programs



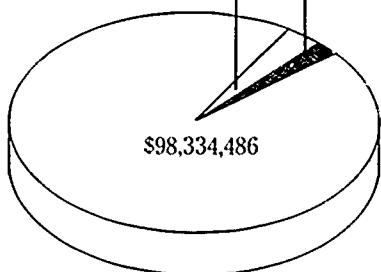
N = 94

N = 94

Figure 11. Breakdown of Total Operating Revenue from U.S. Science Center Respondents' Education Programs

Program fees and publications  
\$10,917,455 (11%)

Special Events  
\$7,541,029 (8%)



Total pie = Revenue Across All Departments at Responding U.S. Science Centers for Most Recent Fiscal Year

N = 98

## What is a successful education program?

We asked respondents to tell us why they had selected the education programs they did to describe in the survey as models. Our goal was to discover which factors respondents feel contribute to the success of a science center education program, and perhaps to suggest a profile of an "ideal" education program.

Although there has been some research conducted about what makes a good exhibit, few attempts have been made to come up with criteria for good education programs. Because visitors usually pay for education programs (or at least sign up for them), it is easy for science centers to see which programs are the most popular and enjoyable. But how can science museum professionals be sure that such programs offer the public more than a pleasant diversion?

For an education program to be successful, 71 survey respondents

felt that it should be participatory, or hands-on. A learning environment that is nonthreatening, relaxed, stimulating, and fun was considered important by 60 respondents. At least nine respondents said that their education programs were successful because they helped people feel more comfortable with science. Also considered a key element in successful programs (mentioned 39 times) was access to the "real thing"—scientific equipment, live animals, and artifacts or unusual objects. Education programs were also considered successful if they allowed participants to earn university credits, stipends, free materials, or other rewards. Because so many education programs are coordinated with school curricula, many respondents credited their success to ties with local school systems.

Forty-five respondents felt that success lay in the actual program

content, by providing scientific information and opportunities to develop critical thinking skills. In addition, 26 respondents mentioned that the high quality of science center staff were responsible for the success of many programs.

Flexibility in program structure was cited by 33 respondents as an asset, especially for parents who are trying to juggle home and work schedules. Parents appreciate the services science centers offer, day care, after-school, holiday, weekend, and summer programs.

In summary, a successful education program is likely to offer hands-on activities in a nonthreatening environment, high-quality staff and program content, access to the "real thing", and a flexible structure. Also, many programs are considered successful because they complement school curriculum or offer participants a stipend, the opportunity to earn university credit, or other incentives.

## How Do Museum Professionals Judge the Success of a Program?

Hands-on, participatory (71)	Content of program (45)	Ties in with or complements school curriculum, coordinated with local school system(s) (33)
social interaction (46)	participants learn to articulate concepts, and analyze scientific principles, develop critical thinking and other skills (12)	cooperation with state and or county school system (21)
hands-on (40)	provides latest scientific information, visitors gain scientific knowledge (11)	museum develops curriculum-related programs and support materials (9)
interaction between presenter and audience, staff and visitor (21)	provides science enrichment activities (7)	school subsidizes program, including admission and transportation (3)
allows for socializing, development of interpersonal skills, building self-esteem (16)	helps students make career decisions (6)	
families can learn together (9)	provides in-depth experiences (5)	
interactive (8)	explainers gain valuable experience (2)	
lots of concrete experiences, visual effects (8)	topics are attractive to children (1)	
participatory (6)	builds interest in local history (1)	
do it yourself exhibits, projects, computer programming, video footage (5)	The real thing (39)	
visitor has opportunity to do experiments (4)	access to scientific equipment (17)	
Enjoyable, engaging, pleasant environment (60)	fun, exciting to learn from real objects, artifacts (7)	
exciting (13)	real field, outdoor experience, such as archeological dig (6)	
fun (12)	live animals (6)	
stimulating (11)	opportunity to see and touch unusual things (3)	
informal (9)	Unique opportunity, exclusive resources (37)	
nonthreatening (6)	unique, or only program of this type in community (8)	
entertaining (5)	provides what schools can't (7)	
friendly (3)	preschoolers . . . new audience, few programs available for them (7)	
relaxed (2)	offers students opportunities unavailable elsewhere (6)	
Earn university credit, stipend, or other incentives provided (52)	museum provides unique resources for classroom teachers (5)	
free or low-cost materials to take home or to classroom (22)	serves populations that can't visit museums (2)	
cost is low (6)	reaches remote, or rural communities (2)	
college credit (4)	Structure of program (33)	
students' expenses covered by school system (4)	motivates them to learn (9)	
student stipends (2)	multidisciplinary approach (7)	
in-service credit (2)	flexibility in schedule, esp helpful to parents (7)	
meal or snack provided (2)	museum provides day-care or after-school care services (5)	
no cost to teachers (2)	small classes (3)	
reasonable, affordable (2)	focused program with clear-cut mission (1)	
certificate renewal credit (1)	children can advance at their own pace (1)	
funds to purchase equipment or fund curriculum projects (1)		
teacher stipend (1)		
cash award to school (1)		
grant-funded, free to all schools, youth groups (1)		
free to everyone (1)		
		Motivated, enthusiastic participants (6)
		Total number of responses = 474

(Number of responses appears in parentheses)



## Future audiences for science center programs

We asked respondents to tell us if they anticipate changes in the audience they serve in the next five years, and if so, what those changes were expected to be.

Of the 113 institutions who responded to the question, 17 science centers said they predict a larger or broader audience in the next five years. Science World British Columbia expects an attendance increase of 400 percent when it opens in 1989 at a new site. The Vermont Institute of Natural Science has up to now concentrated most of its efforts on outreach programs, but plans to do programs on site, which will result in a projected attendance increase of 300 percent. The New York Hall of Science expects to double its audience in five years or less, and the Museum of the Rockies in Montana anticipates a jump in attendance from 72,000 to 250,000

visitors a year when its new facility opens.

However, 26 science centers expected no change at the time of the survey. The Children's Museum, Boston, said, "We have worked hard to broaden our audience racially and economically—with success." Red Mountain Museum said evening attendance has skyrocketed with the introduction of math workshops and math for families.

Many respondents said they expect a change in the composition of the audience they serve.

Some science centers (13) said they expect to attract more adults, for a variety of reasons. The Discovery Hall in Austin and the Schenectady Museum in New York both plan to attract more adults and to strengthen ties to regional and local schools and colleges. The Museum of Scientific Discovery in Harrisburg

has similar plans, and also hopes that companies and organizations will begin to view the museum as a site for special events. The Discovery Center, Syracuse, said that it is slowly shaking off public perception of the museum as a children's place. By making changes in its exhibits, the Center for Education Museums in Bangkok hopes to attract more adults. Catawba Science Center in North Carolina said it expects more adults because of a demographic shift, and Fresno's Discovery Center will offer more classes especially for adults. The Franklin Institute said, "We are going to try very, very hard to increase the adult audience (people coming without children). We may even become a place to bring a date. Yes, we are getting an unrestricted liquor license."

Other science museums (12) said



Courtesy of Santa Barbara Museum of Natural History, Santa Barbara, California

they expected an increase in tourists over the next five years. Omniplex in Oklahoma City expects an increase in tourists because of the opening of a major race track in the area that will attract out-of-state visitors. The Bradbury Science Center in Los Alamos expects more tourists when it relocates to the middle of town. Teknoteket, a science center in Norway, reported that their new site will make it easy for people to reach them by public transportation. The Montshire Museum of Science in New Hampshire expects more tourists when it opens in its new Vermont facility, while the Health Adventure in North Carolina cited its new location as a plus. The Louisiana Science Centre said a skywalk that will be constructed between the convention center and the Science Centre will bring in tourists when the facility opens. The Memphis Pink Palace Museum mentioned that thanks to a better funded Convention Visitors Bureau, more tourists are getting information about the museum. The Missouri Botanical Garden expects to attract more tourists through improved advertising.

Some science centers (10) said they expect to serve more minorities, largely because they intend to take steps to attract that audience. The Lawrence Hall of Science said, "We are achieving an increase in minority student/teacher participation and hope this will continue." The Power House in Sydney, Australia, predicted a 500 percent increase in minorities, citing "much broader social contact in non-Eng-

lish speaking areas." Several science centers said they hoped to achieve this goal through offering programs and events that will explore the history and heritage of various minority groups, and through special marketing campaigns and outreach efforts.

Six museums mentioned an increased emphasis on preschoolers. New Jersey State Museum; Montshire Museum of Science in New Hampshire, Missouri Botanical Garden, Brooklyn Children's Museum in New York, The Magic House in Missouri, which recently opened a preschool area, and Kalamazoo Public Museum in Michigan, which predicted an increase in preschool museum programs but a decrease in school classes because of bus and budget costs.

While several museums plan to step up their services to grade school children (Alberta Science Centre in Calgary, Birla Industrial and Technology Museum in Calcutta, and Museo Tecnologico in Mexico City), other museums reported zeroing in on the teenage young adult crowd. Sacramento Science Center in California wants to make a concentrated effort to address the drop-out problem, while The Discovery Museums in Massachusetts, the Museum of History and Science in Kentucky, and the Nature Science Center in North Carolina said they will offer more programs to attract the 17-25 year old group.

Other science centers (7) said they expect to serve more school groups and teachers. School groups

from Mexico have caused a surge in attendance at Insights—El Paso Science Center in Texas, from zero to 2,092 children in school groups in just six months. The Children's Museum of Utah hopes to reach more teachers through outreach and summer workshops at the museum, while Nehru Science Centre in Bombay expects teachers to make better use of the museum.

The Schiele Museum of Natural History in North Carolina expects to serve more disabled people over the next five years, as does the Midland Center for the Arts in Michigan, which has expanded its programs for disabled people. The Midland museum also plans to serve more senior citizens, along with a number of other science centers: The Science Museum of Virginia, Oregon Museum of Science and Industry, Buhl Science Center in Pennsylvania, Detroit Science Center in Michigan, and the Schiele Museum all expect to develop more programs for this age group. Several cited changing demographics as the reason for the expected increase in senior citizen visitors. In addition, seven science centers expect the number of family visitors to increase.

Science centers offer their communities a rich diversity of education programs. Over the next five years, these programs will be continued and expanded with a new goal to reach a more diverse audience, with more programs designed for preschoolers, senior citizens, disabled people, and women.



## Appendix A: Footnotes and Bibliography

### Footnotes

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- 8 *Ibid*, p. 654.
- 9 Mark St. John, *An Assessment of the Exploratorium Teacher Institute: Summary of Findings*, (Inverness: Inverness Research Associates, 1987), pp. 28-29.

- 10 Theodore H. Ansbacher, "Science Museums and Teacher Education," *Towards the Year 2000: International Perspectives on Museums of Science and Technology*, ed. Victor J. Danilov, (Washington, DC: Association of Science-Technology Centers, 1981), p. 39.

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**Appendix E: Exhibits questionnaire and related questions from other sections of survey**

ASSOCIATION OF SCIENCE-TECHNOLOGY CENTERS

Basic Science Center Data Survey

Educational Programs Section

Name of Institution: \_\_\_\_\_

PLEASE INDICATE WHO WAS RESPONSIBLE FOR FILLING OUT PORTIONS OF THIS QUESTIONNAIRE BY INDICATING NAME, PHONE NUMBER AND THE QUESTION NUMBERS FOR WHICH EACH PERSON WAS RESPONSIBLE.

Name	Telephone Number	Page Number

38. We are interested in knowing what educational programs are available to various target audiences. Please indicate which programs you offer by circling the appropriate numbers below.  
CIRCLE ALL THAT APPLY.

	Preschoolers	Elementary schoolers	Junior high schoolers	High schoolers	University students	Senior citizens	Handicapped	Minority groups	Females	Serves all groups
a. Camp in programs.....	1	2	3	4	5	6	7	8	9	10
b. Classes/ workshops.....	1	2	3	4	5	6	7	8	9	10
c. Field trips into the community.....	1	2	3	4	5	6	7	8	9	10
d. Films, space theater shows.	1	2	3	4	5	6	7	8	9	10
e. Guided tours..	1	2	3	4	5	6	7	8	9	10
f. Intern programs.....	1	2	3	4	5	6	7	8	-	-
g. Lectures/ demonstrations	1	2	3	4	5	6	7	8	-	-
h. Performing arts.....	1	2	3	4	5	6	7	8	9	10
i. Planetarium programs.....	1	2	3	4	5	6	7	8	9	10
j. Radio/TV programs.....	1	2	3	4	5	6	7	8	9	10
k. Science clubs.	1	2	*	4	*	*	*	*	*	*
l. Speaker's bureau.....	1	2	*	*	*	*	*	*	*	*
m. Special events	1	2	*	4	*	*	7	8	9	10
n. Tours/travel programs.....	1	2	3	4	*	6	7	8	9	10

19

19. If you offer any other education programs, please describe them (and the intended audience) in the space provided below.

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40. Does your institution conduct programs for classroom teachers and their students?

1. Yes       2. No - SKIP TO QUESTION 41  
ON PAGE 4

- 40a. Does your institution offer any of the following school services? CHECK ALL THAT APPLY.

  - ( ) 1. Career workshops
  - ( ) 2. Curriculum materials, kits, software
  - ( ) 3. Classes or demonstrations at the museum
  - ( ) 4. Classes or demonstrations at schools
  - ( ) 5. Loaned audiovisual materials, exhibits or artifacts
  - ( ) 6. Museum tours/class visits for school groups
  - ( ) 7. Science fairs
  - ( ) 8. Teacher workshops
  - ( ) 9. Other, specify: \_\_\_\_\_

- 40b. Are any of these programs planned jointly with school personnel?

- ( ) 1. Yes ( ) 2. No  
40c. Does your institution have an education advisory

- committee?

- ( ) 1. Yes                    ( ) 2. No  
40d. How many students per year do you normally serve with direct school programs...

EDUCATION PROGRAMS FOR CLASSROOM TEACHERS AND  
STUDENT CONTINUED ON NEXT PAGE. -->

--> ....EDUCATION PROGRAMS FOR CLASSROOM TEACHERS  
AND STUDENTS CONTINUED FROM PREVIOUS PAGE

40e. How many teachers per year do you normally serve  
through your teacher programs?

40f. Do you have school personnel who act in any  
of the following capacities: Yes No

- |  |   |   |
|--|---|---|
| 1. Exhibit development? .....                      | 1 | 2 |
| 2. Education program planning? ....                | 1 | 2 |
| 3. Conducting education programs? .                | 1 | 2 |
| 4. On loan or leave to work at<br>the museum?..... | 1 | 2 |

41. Please describe up to five of the best education programs at your institution that, in your professional judgment, could serve as models for other institutions.

FOR EACH PROGRAM, PROVIDE:

- a. title,
- b. a description of the audience to which it is targeted,
- c. the number of people served by it last year,
- d. up to two theme codes (see pink insert)
- e. a one sentence description,
- f. and why it's a successful program.

EXAMPLE:

a. Title: Teacher internships

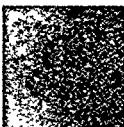
b. Audience: Durham City Second Grade Teachers

c. Number served last year: 5

d. Theme codes: 0100, 2140

e. Description: Selected teachers on sabbatical internships at the museum do teacher workshops and student classes at the museum and in the district.

f. Why it's successful: Teachers get exciting instructional experience; Museum can offer more student services at low cost; maintains close contact with school system



MODEL PROGRAM = 1

a. Title: \_\_\_\_\_

b. Audience: \_\_\_\_\_

c. Number served last year: \_\_\_\_\_

d. Theme codes: \_\_\_\_\_

e. Description: \_\_\_\_\_  
\_\_\_\_\_

f. Why it's successful: \_\_\_\_\_  
\_\_\_\_\_

MODEL PROGRAM = ?

a. Title: \_\_\_\_\_

b. Audience: \_\_\_\_\_

c. Number served last year: \_\_\_\_\_

d. Theme codes: \_\_\_\_\_

e. Description: \_\_\_\_\_  
\_\_\_\_\_

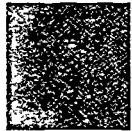
f. Why it's successful: \_\_\_\_\_  
\_\_\_\_\_

MODEL PROGRAM # 3

- a. Title: \_\_\_\_\_
- b. Audience: \_\_\_\_\_
- c. Number served last year: \_\_\_\_\_
- d. Theme codes: \_\_\_\_\_
- e. Description:  
\_\_\_\_\_  
\_\_\_\_\_
- f. Why it's successful: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

MODEL PROGRAM # 4

- a. Title: \_\_\_\_\_
- b. Audience: \_\_\_\_\_
- c. Number served last year: \_\_\_\_\_
- d. Theme codes: \_\_\_\_\_
- e. Description:  
\_\_\_\_\_  
\_\_\_\_\_
- f. Why it's successful: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



23

MODEL PROGRAM # 5

a. Title: \_\_\_\_\_

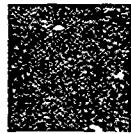
b. Audience: \_\_\_\_\_

c. Number served last year: \_\_\_\_\_

d. Theme codes: \_\_\_\_\_

e. Description: \_\_\_\_\_  
\_\_\_\_\_

f. Why it's successful: \_\_\_\_\_  
\_\_\_\_\_



24

THANK YOU FOR COMPLETING THIS SECTION OF THE QUESTIONNAIRE.  
PLEASE RETURN THIS TO THE PERSON WHO GAVE IT TO YOU SO IT CAN  
BE COMBINED WITH THE OTHER PARTS OF THE SURVEY (FINANCIAL,  
EXHIBITS & COLLECTIONS, AND ADMINISTRATIVE) AND RETURN TO

NEVA NAHAN  
CENTER FOR URBAN STUDIES  
WAYNE STATE UNIVERSITY  
5229 CASS  
DETROIT, MICHIGAN 48202

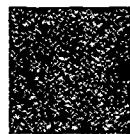


IF YOU HAVE ANY QUESTIONS, PLEASE CALL NEVA NAHAN AT  
(313) 577-2208.

Center for Urban Studies - Wayne State University

56. Please fill in dollar amounts of functional expenses for the most recent fiscal year. DEFINITION OF SOME TERMS ARE ON PAGE ONE.

H. SERVICES	I. WAGES & RELATED EXPENSES	J. OTHER OPERATING EXPENSES	K. NON- OPERATING EXPENSES
<u>Program Services</u>			
18. Exhibits & collections	\$	\$	\$
19. Education programs			
20. Planetarium/theater			
21. Membership programs			
22. Other program services, specify:  _____ _____			
<u>Support Services</u>			
23. Management & general			
24. Plant & facilities			
25. Fund raising, PR & marketing			
26. Museum store			
27. Auxiliary activities			
28. Other support services, specify:  _____ _____			
29. TOTALS			



25

Center for Urban Studies - Wayne State University

## PERSONNEL

7. For each category listed below, please fill in:

- a. total number of full-time paid staff,
- b. total number of part-time paid staff,
- c. the full-time equivalency (FTE) for your part-time paid staff  
(TO CALCULATE FTE: add up all your staff, full time = 1,  
half time or 20 hours per week = .5, etc.)
- d. total number of unpaid staff, and
- e. the FTE for your unpaid staff.

PLEASE PROVIDE YOUR BEST ESTIMATES FOR THE FOLLOWING:

Categories	Paid		Unpaid	
	Full time	Part time	Number	FTE
Administration & finance				
Development & public relations				
Operations (includes security)				
Plant (building & grounds)				
Exhibits				
Theaters, planetariums				
Programs, education				
Museum store				
Food service				
Collections & research				
Other, specify: <hr/>				
TOTALS				

8. Do you have someone on staff whose main responsibility is as a volunteer coordinator?  
( ) 1. Yes, paid    ( ) 2. Yes, unpaid    ( ) 3. No

9. What is the age distribution for your unpaid staff?  
PLEASE ESTIMATE THE PERCENTAGE FOR EACH AGE GROUPING.

a. 17 and under	_____	%
b. 18 - 59	_____	%
c. 60 and over	_____	%
	<u>100</u>	%

10. Have any agencies or organizations donated services and/or paid staff to work at your institution in the past year? (e.g., corporate executive on loan, teacher from a school)  
\_\_\_\_\_( ) 1. Yes                         ( ) 2. No  
v

10a. Please check all the types of services that are donated.

- ( ) 01. Grounds keeping or building maintenance
- ( ) 02. Public relations/advertising
- ( ) 03. Security
- ( ) 04. Education program teaching
- ( ) 05. Legal services
- ( ) 06. Accounting/audit
- ( ) 07. Utilities
- ( ) 08. Planning
- ( ) 09. Other, specify:

11. Are any of your staff represented by unions?  
\_\_\_\_ ( ) 1. Yes ( ) 2. No  
V

11a. What percentage of paid staff is represented by a union or unions?  
\_\_\_\_\_ %

11b. Check all functions that are covered by unions.

- ( ) 1. Clerical
- ( ) 2. Maintenance
- ( ) 3. Skilled/technical
- ( ) 4. Other, specify:



12a. What is their total full-time equivalency?



FACILITIES

Exterior

26. How many acres constitute the entire institution and its grounds?

27. How are your grounds used? acres CHECK ALL THAT APPLY.

- ( ) 1. Picnic area
- ( ) 2. Garden/landscaped area
- ( ) 3. Nature walk
- ( ) 4. Parking lot
- ( ) 5. Science park/outside exhibits
- ( ) 6. Undeveloped
- ( ) 7. Other, specify: \_\_\_\_\_

Interior

28. Please list the square feet dedicated to the each of the following functions:

Function:

Number of Square Feet:

( ) Check here if meters are used

A. PUBLIC

- a. Exhibit space  
(both temporary & permanent) \_\_\_\_\_
- b. Planetarium, Omni, Imax ,  
auditorium and other theater  
space \_\_\_\_\_
- c. Food service and museum store \_\_\_\_\_
- d. Education facilities \_\_\_\_\_
- e. Other public space \_\_\_\_\_

TOTAL PUBLIC SQUARE FEET: \_\_\_\_\_

B. NON-PUBLIC

TOTAL NON-PUBLIC SQUARE FEET:  
(include administrative,  
storage, and other support  
areas) \_\_\_\_\_

C. TOTAL NUMBER OF SQUARE FEET  
(BOTH PUBLIC & NON-PUBLIC) \_\_\_\_\_

Center for Urban Life - Wayne State University

29. Do you have any of the following as part of your facility?  
CHECK ALL THAT APPLY.

A. Exhibit Workshops

- |  |  |    |
|--|--|----|
| <input type="checkbox"/> 01. Metal       | <input type="checkbox"/> 07. Paint & spray | th |
| <input type="checkbox"/> 02. Wood        | <input type="checkbox"/> 08. Other exhibi. | >p |
| <input type="checkbox"/> 03. Electronics | facilities (e)                             |    |
| <input type="checkbox"/> 04. Silkscreen  |  |    |
| <input type="checkbox"/> 05. Plexiglass  |  |    |
| <input type="checkbox"/> 06. Typesetting |  |    |
- 
- 

B. Education Facilities

- |  |  |
|--|--|
| <input type="checkbox"/> 11. Classrooms      | <input type="checkbox"/> 16. Discovery room  |
| <input type="checkbox"/> 12. Preschool area  | <input type="checkbox"/> 17. Other education |
| <input type="checkbox"/> 13. Library and/or  | facilities (explain)                         |
| resource center                              |  |
| <input type="checkbox"/> 14. Computer lab    |  |
| <input type="checkbox"/> 15. Labs other than |  |
| computer                                     |  |
- 
- 

30. In what year did your institution acquire its present main facility?

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31. Is your facility an adaptation of an existing structure or was it constructed for your own use?

- V       1. Adaptation of an existing structure       2. Constructed for your own use

31a. What was its original purpose? (e.g., train station built in the '30s, a Victorian private residence, a World's Fair site, etc.)

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32. Are there any plans to expand your facility or move within the next five years? CHECK ONLY ONE.

1. Yes, to expand or renovate current structure  
 2. Yes, to move to a new building  
 3. Yes, to move into an existing, but different facility  
 4. No plans at this time

**FUTURE**

We are interested in getting your ideas about the future directions of science museums, and how ASTC should plan for the future.

33. What trends do you think will take place in science centers in the next five years?

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34. What changes do you envision will be made at your museum in the next five years?

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30

35. Do you anticipate changes in the audience your institution serves, in the next five years? IF SO, please explain.

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Center for Urban Studies - Wayne State University

## Appendix C: Respondents to ASTC Science Center Survey

The Academy of Natural Sciences  
19th & The Parkway  
Philadelphia, Pennsylvania 19103  
Phone: (215) 299-1000

Aitken Bicentennial Exhibition  
Centre  
20 Hazen Avenue  
Saint John, New Brunswick E2L3G8  
Canada  
Phone: (506) 633-4870

Alberta Science Centre/Centennial  
Planetarium  
701 11th Street SW  
Calgary, Alberta T2P2M5 Canada  
Phone: (403) 264-2030

Alfred P. Sloan Jr. Museum  
1221 E. Kearsley St.  
Flint, Michigan 48503  
Phone: (313) 762-1169

Anniston Museum of Natural History  
4301 McClellan Blvd., Box 1587  
Anniston, Alabama 36202  
Phone: (205) 237-6766

Bell Museum of Natural History  
10 Church Street. S.E.  
Minneapolis, Minnesota 55455  
Phone: (612) 624-4112

Bradbury Science Museum  
P.O. Box 1663, MS-B286  
Los Alamos, New Mexico 87544  
Phone: (505) 667-4444

Brooklyn Children's Museum  
145 Brooklyn Avenue  
Brooklyn, New York 11213  
Phone: (718) 735-4400

Buffalo Museum of Science  
Humboldt Park  
Buffalo, New York 14211  
Phone: (716) 896-5200

Buhl Science Center  
Allegheny Square  
Pittsburgh, Pennsylvania 15212  
Phone: (412) 321-4311

California Academy of Sciences  
Golden Gate Park  
San Francisco, California 94118  
Phone: (415) 221-5100

California Museum of Science  
& Industry  
700 State Drive  
Los Angeles, California 90037  
Phone: (213) 744-7548

Capital Children's Museum  
800 Third Street, N.E.  
Washington, D.C. 20002  
Phone: (202) 543-8600

Carter House Science Museum  
1701 Rio Drive, P.O.Box 185  
Redding, California 96099  
Phone: (916) 225-4125

Catawba Science Center  
P.O.Box 2431, 243 Third Ave. NE  
Hickory, North Carolina 28601  
Phone: (704) 322-8169

Centre for Educational Museums  
928 Sukhumvit Road  
Bangkok, 10110 Thailand  
Phone: (02) 392-5960

Centro Cultural Alfa  
P.O. Box 1177  
Monterrey, N.L. 64000 Mexico  
Phone: (83) 780169

The Chicago Academy of Sciences  
2001 N. Clark Street  
Chicago, Illinois 60614  
Phone: (312) 549-0606

Chicago Botanic Garden  
P.O. Box 400  
Glencoe, Illinois 60022  
Phone: (312) 835-5440

The Children's Museum  
Box 3000, 3000 N. Meridian St.  
Indianapolis, Indiana 46206  
Phone: (317) 924-5431

The Children's Museum  
Museum Wharf, 300 Congress St.  
Boston, Massachusetts 02210  
Phone: (617) 426-6500

The Children's Museum of Houston  
3201 Allen Parkway  
Houston, Texas 77019  
Phone: (713) 522-1138

The Children's Museum of Utah  
840 North 300 West  
Salt Lake City, Utah 84103  
Phone: (801) 328-3384

Cleveland Children's Museum  
10730 Euclid Avenue  
Cleveland, Ohio 44106  
Phone: (216) 791-7114

Cleveland Health Education Museum  
8911 Euclid Avenue  
Cleveland, Ohio 44106  
Phone: (216) 231-5010

Cranbrook Institute of Science  
500 Lone Pine Rd, P.O. Box 801  
Bloomfield Hills, Michigan 48013  
Phone: (313) 645-3260

Cumberland Science Museum  
800 Ridley Boulevard  
Nashville, Tennessee 37203  
Phone: (615) 259-6099

Detroit Science Center  
5020 John R. Street  
Detroit, Michigan 48202  
Phone: (313) 577-8400

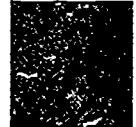
Deutsches Museum  
Museumsinsel Nr. 1  
8000 Munich 26, West Germany  
Phone: (089) 21791

The Discovery Center  
1944 N. Winery Avenue  
Fresno, California 93703  
Phone: (209) 251-5533

The Discovery Center  
321 South Clinton Street  
Syracuse, New York 13202  
Phone: (315) 425-9068

Discovery Center Museum  
711 N. Main Street  
Rockford, Illinois 61103  
Phone: (815) 963-6769

Discovery Center of the  
Capital Region  
Box 2235, Empire State Plaza  
Albany, New York 12220  
Phone: (518) 474-5801



Discovery Hall P.O. Box 7576 Austin, Texas 78703 Phone: (512) 474-7616	Hall of Ideas, Midland Center for the Arts 1801 W. St. Andrews Road Midland, Michigan 48640 Phone: (517) 631-5930	Kansas Learning Center for Health 309 Main Street Halstead, Kansas 67056 Phone: (316) 835-2662
Discovery Museum 57 Park Street Essex Junction, Vermont 05452 Phone: (802) 878-8687	Hall of Life Denver Museum of Natural History City Park, 2100 Colorado Boulevard	LSU Museum of Geoscience Louisiana State University Baton Rouge, Louisiana 70803 Phone: (504) 388-2931
Discovery Museum of Orange County 3101 W. Harvard Street Santa Ana, California 92625 Phone: (714) 540-0424	Denver, Colorado 80205 Phone: (303) 861-5671	Lakeview Museum of the Arts & Sciences 1125 West Lake Avenue Peoria, Illinois 61614 Phone: (309) 686-7000
The Discovery Museums 177 Main Street Acton, Massachusetts 01720 Phone: (617) 264-4201	Hanford Science Center P.O. Box 1970, Mailstop A-160 Richland, Washington 99352 Phone: (509) 376-6826	Lawrence Hall of Science Centennial Drive University of California Berkeley, California 94720 Phone: (415) 642-4193
Don Harrington Discovery Center 1200 Streit Drive Amarillo, Texas 79106 Phone: (806) 355-9548	The Health Adventure 501 Biltmore Avenue Asheville, North Carolina 28801 Phone: (704) 254-6373	Louisiana Science Centre & IMAX Theater P.O. Box 51570, Julia St. Wharf New Orleans, Louisiana 70151 Phone: (504) 529-3622
Dutch Institute for Industry & Technology Tolstraat 129 Amsterdam, 1074VJ The Netherlands Phone: (020) 646021	Houston Museum of Medical Science 500 Caroline, Box 88087 Houston, Texas 77288 Phone: (713) 529-3766	The Magic House 516 South Kirkwood Road St. Louis, Missouri 63122 Phone: (314) 822-8905
Eastern Washington Science Center 300 Patterson Mall Cheney, Washington 99004 Phone: (509) 359-6391	Idaho Museum of Natural History P.O. Box 8096 Pocatello, Idaho 83209 Phone: (208) 236-3168	Mayo Medical Museum Mayo Clinic, 200 First Street SW Rochester, Minnesota 55905 Phone: (507) 284-3280
Evansville Museum of Arts and Science 411 SE Riverside Drive Evansville, Indiana 47713 Phone: (812) 425-2406	Impression 5 Science Museum 200 Museum Drive Lansing, Michigan 48933 Phone: (517) 485-8116	McAllen International Museum 1900 Nolana McAllen, Texas 78504 Phone: (512) 682-1564
Exploratorium 3601 Lyon Street San Francisco, California 94123 Phone: (415) 563-7337	Indiana State Museum 202 North Alabama Street Indianapolis, Indiana 46204 Phone: (317) 232-1631	Memphis Pink Palace Museum & Planetarium 3050 Central Avenue Memphis, Tennessee 38111 Phone: (901) 454-5603
Fernbank Science Center 156 Heaton Park Drive NE Atlanta, Georgia 30307 Phone: (404) 378-4311	Insights—El Paso Science Center, Inc. 303 North Oregon Street El Paso, Texas 79901 Phone: (915) 542-2990	Milwaukee Public Museum 800 West Wells Street Milwaukee, Wisconsin 53233 Phone: (414) 278-2702
The Franklin Institute Science Museum 20th & the Parkway Philadelphia, Pennsylvania 19103 Phone: (215) 448-1208	Jacksonville Museum of Arts & Science 1025 Gulf Life Drive Jacksonville, Florida 32207 Phone: (904) 396-7062	Missouri Botanical Garden P.O. Box 299 St. Louis, Missouri 63166 Phone: (314) 577-5140
Georgia Southern Museum Box 8061 Georgia Southern College Statesboro, Georgia 30460 Phone: (912) 681-5444	Kalamazoo Public Museum 315 South Rose Street Kalamazoo, Michigan 49007 Phone: (616) 345-7092	Montshire Museum of Science 45 Lyme Road Hanover, New Hampshire 03755 Phone: (603) 643-5672
	The Kansas City Museum 3218 Gladstone Boulevard Kansas City, Missouri 64123 Phone: (816) 483-8300	

Museo Tecnologico de C.F.E. Apdo. Postal 18-816 Mexico City, D.F. C.P.11870 Mexico Phone: (905) 516-1357	National Air & Space Museum 6th & Independence Ave., SW Smithsonian Institution Washington, DC 20560 Phone: (202) 357-2838	North Carolina Museum of Life & Science P.O. Box 15192 Durham, North Carolina 27503 Phone: (919) 477-0431
Museum of Applied Arts and Sciences 659 Harris Street Sydney, New South Wales 2007, Australia Phone: (02) 217-0111	National Museum of American History 14th St. and Constitution, NW Smithsonian Institution Washington, DC 20560 Phone: (202) 357-2700	The Oakland Museum 1000 Oak Street Oakland, California 94607 Phone: (415) 273-3402
Museum of Art, Science & Industry 4450 Park Avenue Bridgeport, Connecticut 06604 Phone: (203) 372-3521	National Museum of Natural Science No. 1 Kuan Chien Tchung, Taiwan	Ohio's Center of Science and Industry 280 E. Broad Street Columbus, Ohio 43215 Phone: (614) 228-5619
Museum of History & Science 727 West Main Street Louisville, Kentucky 40202 Phone: (502) 589-4589	Republic of China Phone: (04) 226-6940	Omniplex Science Museum 2100 NE 52nd Street Oklahoma City, Oklahoma 73111 Phone: (405) 424-5545
Museum of Natural History University of Kansas Lawrence, Kansas 66045 Phone: (913) 864-4541	National Science Center for Communications & Electronics 4400 Fair Lakes Court Fairfax, Virginia 22041 Phone: (703) 631-6225	Ontario Science Centre 770 Don Mills Road Don Mills, Ontario M3C1T3 Canada Phone: (416) 499-4100
Museum of Science Science Park Boston, Massachusetts 02114 Phone: (617) 589-0100	National Taiwan Science Education Centre 41 Nan-hai Road Taipei, Taiwan 10728 Republic of China Phone: (02) 331-5997	Oregon Museum of Science & Industry 4015 S.W. Canyon Road Portland, Oregon 97221 Phone: (503) 222-2828
Museum of Science 3280 S. Miami Avenue Miami, Florida 33129 Phone: (305) 854-4247	The Natural Science Center of Greensboro 4301 Lawndale Drive Greensboro, North Carolina 27408 Phone: (919) 288-3769	Orlando Science Center, Inc. 810 East Rollins Street Orlando, Florida 32803 Phone: (305) 896-7151
Museum of Science and Industry 57th St. and Lake Shore Drive Chicago, Illinois 60637 Phone: (312) 684-1414	Nature Science Center Museum Drive Winston-Salem, North Carolina 27105 Phone: (919) 767-6730	Pacific Science Center 200 Second Ave N. Seattle, Washington 98109 Phone: (206) 625-9333
Museum of Science and Industry 4801 E. Fowler Avenue Tampa, Florida 33617 Phone: (813) 985-5531	Nehru Science Centre Dr. E. Moses Road, Worli Bombay, Maharashtra 400018 India Phone: 493-2668	Red Mountain Museum 1421 22nd Street South Birmingham, Alabama 35205 Phone: (205) 933-4152
Museum of Scientific Discovery P.O. Box 934, Strawberry Square Harrisburg, Pennsylvania 17108 Phone: (717) 233-7969	New England Science Center 222 Harrington Way Worcester, Massachusetts 01604 Phone: (617) 791-2111	Reuben H. Fleet Science Center P.O. Box 33303 San Diego, California 92103 Phone: (619) 238-1233
Museum of the Rockies Montana State University Bozeman, Montana 59717 Phone: (406) 994-2251	New Jersey State Museum 205 West State Street CN-530 Trenton, New Jersey 08625 Phone: (609) 292-6300	Sacramento Science Center & Junior Museum 3165 Auburn Boulevard Sacramento, California 95821 Phone: (916) 449-8255
Nagoya Municipal Science Museum 17-22, Sakae 2-chome, Nakaku Nagoya, 460 Japan Phone: (052) 201-4486	New York Hall of Science 47-01 111th Street Corona, New York 11368 Phone: (718) 699-0005	Santa Barbara Museum of Natural History 2559 Puesta Del Sol Santa Barbara, California 93105 Phone: (805) 682-4711

- Saskatchewan Science Centre  
2060 Broad Street  
Regina, Saskatchewan S4P1Y3  
Canada  
Phone: (306) 352-2797
- Schenectady Museum and Planetarium  
Nott Terrace Heights  
Schenectady, New York 12308  
Phone: (518) 382-7890
- Schiele Museum of Natural History  
1500 E. Garrison  
Gastonia, North Carolina 28054  
Phone: (704) 861-0950
- Science World  
600 Granville  
Vancouver, British Columbia  
V7S1C2 Canada  
Phone: (604) 687-8414
- Sci-Tech Center at Liberty State Park  
870 Bergen Avenue  
Jersey City, NJ 07306  
Phone: (201) 795-9155
- Science & Technology Centre of Indonesia  
Ristek, Jl., Veteran III, 2nd Fl  
Jakarta, 10110 Indonesia  
Phone: (011) 62 21 348.905
- Science & Technology Museum of Atlanta  
395 Piedmont NE  
Atlanta, Georgia 30308  
Phone: (404) 522-5500
- Science Center of Iowa  
4500 Grand Avenue  
Des Moines, Iowa 50312  
Phone: (515) 274-4138
- Science Center of New Hampshire  
P.O. Box 173  
Holderness, New Hampshire 03245  
Phone: (603) 968-7194
- Science Discovery Center of Tompkins Co.  
P.O. Box 6697  
Ithaca, New York 14851  
Phone: (607) 273-5596
- Science Museum of Connecticut  
950 Trout Brook Drive  
West Hartford, Connecticut 06119  
Phone: (203) 236-2961
- The Science Museum of Minnesota  
30 E. 10th Street  
St. Paul, Minnesota 55101  
Phone: (612) 221-4713
- Science Museum of Virginia  
2500 W. Broad Street  
Richmond, Virginia 23220  
Phone: (804) 257-6799
- Science Museums of Charlotte  
301 North Tryon Street  
Charlotte, North Carolina 28202  
Phone: (704) 372-6261
- The Science Place  
Fair Park, P.O. Box 11158  
Dallas, Texas 75223  
Phone: (214) 428-7200
- Science Station  
427 First Street SE  
Cedar Rapids, Iowa 52401  
Phone: (319) 366-0968
- Singapore Science Centre  
Science Centre Road  
Singapore 2260  
Republic of Singapore 2260  
Phone: 560-3316
- South Carolina State Museum  
P.O. Box 100107  
Columbia, South Carolina 29202  
Phone: (803) 737-4921
- South Florida Science Museum  
4801 Dreher Trail  
West Palm Beach, Florida 33405  
Phone: (305) 832-1348
- The Space Center  
P.O. Box 533  
Alamogordo, New Mexico 88311  
Phone: (505) 437-2840
- Springfield Science Museum  
236 State Street  
Springfield, Massachusetts 01103  
Phone: (413) 733-1194
- St. Louis Science Center  
5050 Oakland Avenue  
St. Louis, Missouri 63110  
Phone: (314) 289-4400
- Teknateket  
2B Konvallun  
0855 Oslo 8, Norway  
Phone: (47) 02 18 31 33
- The Technology Center of Silicon Valley  
95 S. Market Street  
San Jose, California 95113  
Phone: (408) 279-7150
- Thames Science Center  
Gallows Lane  
New London, Connecticut 06320  
Phone: (203) 442-0391
- Vermont Institute of Natural Science  
r.o. Box 86, Church Hill  
Woodstock, Vermont 05091  
Phone: (802) 457-2779
- Virginia Living Museum  
524 J. Clyde Morris Boulevard  
Newport News, Virginia 23601  
Phone: (804) 595-1900

## **About ASTC**

The Association of Science-Technology Centers is an international nonprofit association of more than 260 science centers and related organizations that are dedicated to increasing the public understanding of science and technology. Since its founding in 1973, ASTC has sought to improve communication among its members and to advance the role of informal science education in society.

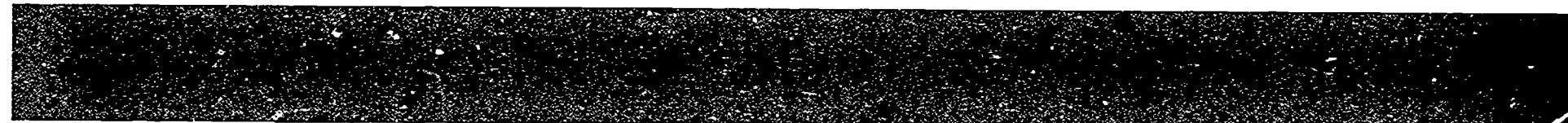
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For more information, write to  
ASTC, 1413 K St., NW, Tenth Floor,  
Washington, DC 20005-3405; or call  
202/371-1171.

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Washington, DC



Association of  
Science-Technology Centers  
1413 K Street, N.W., Tenth Floor  
Washington, D.C. 20005-3405  
(202) 371-1171



The ASTC

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Science Center  
Survey

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Education  
Directory

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## **Appendix D: Education Program Directory**

This directory, based on a computerized database, lists more than 400 education programs and groups them by subject. The categories used here are based roughly on those used by ISIS, the journal of the History of Science Society, one of the few comprehensive indexing systems for the sciences. We asked respondents to assign primary and secondary codes to their own programs, using a list we provided. For the most part, we used their codes in generating this listing. When there was a meaningful secondary code assigned to an education program, it is listed here twice. We added several program categories, such as teacher training and outreach, because so many of the model programs reported were in these areas.

At the end of the directory, there is an abbreviated listing by type of program (camp-ins, for example) where you can see at a glance which institutions offer which kinds of programs.

**ASTC Science Center Survey**  
**Table of Contents**

GENERAL SCIENCE .....	1
MATHEMATICS .....	10
GENERAL PHYSICS .....	11
PHYSICS/MECHANICS .....	15
PHYSICS/FLUID MECHANICS .....	15
PHYSICS/ACOUSTICS .....	15
PHYSICS/HEAT, THERMODYNAMICS .....	16
PHYSICS/OPTICS (See also SOCIAL SCIENCES/PSYCHOLOGY) .....	16
PHYSICS/ELECTRICITY AND MAGNETISM (See also TECHNOLOGY/ENERGY) .....	17
CHEMISTRY .....	18
ASTRONOMY .....	19
Space Research and Exploration .....	21
Solar System .....	23
Stars and Star Clusters .....	24
EARTH SCIENCES .....	25
EARTH SCIENCES/METEOROLOGY .....	26
EARTH SCIENCES/GEOLOGY (See also TECHNOLOGY/ENERGY, POWER PRODUCTION) .....	26
EARTH SCIENCES/GEOGRAPHY .....	27
EARTH SCIENCES/PALEONTOLOGY .....	28
Dinosaurs .....	28

NATURAL HISTORY, LIFE SCIENCES (See also BIOLOGY) .....	29
BIOLOGY (See also NATURAL HISTORY, LIFE SCIENCES) .....	32
BIOLOGY/EVOLUTION .....	33
BIOLOGY/ECOLOGY .....	33
BIOLOGY/BOTANY .....	36
BIOLOGY/ZOOLOGY .....	37
Live Animals .....	38
SOCIAL SCIENCES/ANTHROPOLOGY .....	38
Human Evolution .....	40
Archaeology .....	40
SOCIAL SCIENCES/PSYCHOLOGY (See also PHYSICS/OPTICS) .....	41
SOCIAL SCIENCES/HISTORY, MISCELLANEOUS .....	41
MEDICINE AND HEALTH .....	42
Fitness, Personal Health .....	43
Nutrition .....	44
Dental Health .....	44
MEDICINE/SYSTEMS OF THE BODY .....	44
Heart, Cardiovascular System .....	46
FOOD, AGRICULTURE, FORESTRY .....	46
TECHNOLOGY .....	46
TECHNOLOGY/CIVIL ENGINEERING, ARCHITECTURE .....	46
TECHNOLOGY/ENERGY, POWER PRODUCTION (See also PHYSICS/ELECTRICITY; EARTH SCIENCES) .....	46
TECHNOLOGY/MATERIALS AND PROCESSES .....	47

TECHNOLOGY/COMMUNICATIONS .....	47
TECHNOLOGY/COMPUTERS .....	47
TECHNOLOGY/LASERS (See also Holograms) .....	48
EDUCATION .....	48
SCIENTIFIC METHOD AND PROCESS .....	51
CAREERS IN SCIENCE .....	53
OTHER .....	53
EDUCATIONAL PROGRAMS, BY TYPE OF PROGRAM .....	59

51

50

**EDUCATIONAL PROGRAMS**  
**Reported in Science-Center Data Survey**

SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
<b>THEME: GENERAL SCIENCE</b>					
Science Discovery Center of Tompkins Co. Ithaca, New York	After School Program	Hands-on activities, plus program provides after-school care.	0	Elementary	Classes, Workshops
Oregon Museum of Science & Industry Portland, Oregon	After School Programs in Community	Science classes conducted at community centers.	400	Elem thru Jr Hi	Outreach
Museum of History & Science Louisville, Kentucky	Aha Classes	Enrichment programs on topics such as Inchworms, Gadgets.	321	Kindergarten	Classes, Workshops
Lakeview Museum of the Arts & Sciences Peoria, Illinois	Art & Science Classes	Variety of topics offered 3 times a week, usually for 8 weeks.	900	All Ages/Gen Aud.	Classes, Workshops
Oregon Museum of Science & Industry Portland, Oregon	Ask Center/Neighborhood Science Class	Low-income or minority children learn science and math through museum clubs.	150	Children	Science Clubs
New England Science Center Worcester, Massachusetts	Boy Scout and Girl Scout Sleepovers	Camp-ins for Boy and Girl Scout troops.	600	Elem thru Jr Hi	Camp-in
Science Museums of Charlotte Charlotte, North Carolina	By Gosh It Works!	Hands-on science methodology for teachers.	125	Teachers	Teacher Training
Ohio's Center of Science and Industry Columbus, Ohio	COSI Camp-in	Special workshops plus chance to browse exhibits, see demonstrations.	32000	Females	Camp-in
Ohio's Center of Science and Industry Columbus, Ohio	COSI on Wheels	Hands-on activities, daylong visit to schools across Ohio.	80000	Other	Outreach
Science Museum of Virginia Richmond, Virginia	Camp-in	Science or computer workshops, planetarium program and visits to exhibits.	2500	Females	Camp-in
Museum of Scientific Discovery Harrisburg, Pennsylvania	Camp-in	Workshops, exhibit exploration.	5000	Elementary	Camp-in

**EDUCATIONAL PROGRAMS**  
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SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
Science Center of Iowa Des Moines, Iowa	Camp-in Program	Scouts, 4-H, foreign exchange programs, or families can enjoy camp-in.	1183	All Ages/Gen Aud.	Camp-in
Museum of Science Boston, Massachusetts	Camp-ins	Theater programs, workshops, demonstrations.	21200	Elem thru Jr Hi	Camp-in
Museum of the Rockies Bozeman, Montana	Children's Science Book and Equipment Fair	Enrichment materials, including kits, computers, and software.	600	Other	Special Events
The Science Place Dallas, Texas	China School Tours	School tours of China exhibition includes interaction with artisans.	52000	Elem thru Hi Sch	Guided Tours
Cumberland Museum and Science Center Nashville, Tennessee	Cumberland Challenge	Underprivileged visitors learn to use museum, earn achievement points.	96	Children	Classes, Workshops
Springfield Science Museum Springfield, Massachusetts	Dinosaurs	Hands-on investigation of dinosaurs.	3700	Elementary	Classes, Workshops
The Chicago Academy of Sciences Chicago, Illinois	Ecological Citizenship	Hands-on environmental education.	1600	Elem thru Jr Hi	Field Trips, Studies
Catawba Science Center Hickory, North Carolina	Educational Outreach	Outreach hands-on science programs to enhance school curriculum.	12246	Elem thru Hi Sch	Outreach
Museum of Science Boston, Massachusetts	Elementary Science Outreach Programs	Science kits available for rental.	800	Teachers	Outreach
Oregon Museum of Science & Industry Portland, Oregon	Exhibit Enhancement thru Programs	Explainers, specialists interact with visitors to enrich exhibit experience.	500000	All Ages/Gen Aud.	Lectures, Demos
Museum of Science & Industry Tampa, Florida	Explainer Program	Students are paid to operate exhibits, do programs.	15	High School	Explainers
The Science Place Dallas, Texas	Exploring the Science Place (ESP)	Sleepover for area youth agencies features science activities.	7000	Elem thru Jr Hi	Camp-in

**EDUCATIONAL PROGRAMS**  
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SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
Schenectady Museum and Planetarium Schenectady, New York	Family Adventures	After 2-hour introduction in evening, Saturday trip to museum.	165	Families	Guided Tours
Museum of Science Miami, Florida	Fifth Grade Science Education Program	School board pays for entire program, including transportation.	7000	Elementary	Lectures, Demos
Museum of Scientific Discovery Harrisburg, Pennsylvania	Fire Safety: "Get Out! Stay Out!"	Practice fire escape procedures using life-sized props.	2435	Preschoolers	Classes, Workshops
The Children's Museum of Houston Houston, Texas	Focus Tours	Museum guide books are provided to help teachers coordinate lessons with visits.	0	Elementary	Guided Tours
Eastern Washington Science Center Cheney, Washington	Friday Afternoon Special Programs	Special programs presented to visitors on Friday afternoons.	300	All Ages/Gen Aud.	Special Events
Lawrence Hall of Science Berkeley, California	GEMS (Great Explorations in Math and Science)	GEMS is publishing a selection of LHS's best science and math activities.	5000	Teachers	Outreach
The Academy of Natural Sciences Philadelphia, Pennsylvania	George Washington Carver Summer Scholars Program	Nonwinners of science fair project get free one-week summer science program.	16	Elem thru Hi Sch	Classes, Workshops
The Natural Science Center of Greensboro Greensboro, North Carolina	Greensboro Public Schools Contract	Programs based on school curriculum.	32000	Elem thru Hi Sch	Classes, Workshops
The Chicago Academy of Sciences Chicago, Illinois	Group Programs	Programs complement Chicago Board of Educ. curriculum.	20000	Preschool-Gr. 12	Guided Tours
Springfield Science Museum Springfield, Massachusetts	Guided Tour	Tour of museum's major exhibit areas.	20000	Elem thru Hi Sch	Guided Tours
South Florida Science Museum West Palm Beach, Florida	Holiday Camps	Science enrichment program offered at seasonal school breaks.	120	Elementary	Classes, Workshops
Science Center of Iowa Des Moines, Iowa	In-center Demonstration Program	Area specialists develop and present demos on various science topics.	57941	All Ages/Gen Aud.	Lectures, Demos

**EDUCATIONAL PROGRAMS**  
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SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
Omniplex Science Museum Oklahoma City, Oklahoma	Inservice Workshops	Teachers learn hands-on techniques, emphasis on low cost materials.	631	Teachers	Teacher Training
Ontario Science Centre Don Mills, Ontario, Canada	Intermediate Science for Teachers	One-month university-accredited course on science teaching techniques.	28	Teachers	Teacher Training
The Franklin Institute Science Museum Philadelphia, Pennsylvania	Kids 3-6	Guided exhibit experience, computer lesson, planetarium show.	2984	Preschoolers	Classes, Workshops
Science Center of Iowa Des Moines, Iowa	King/Perkins Science Magnet School Project	Museum facility and equipment used to enhance magnet school science programs.	590	Elementary	Classes, Workshops
Museo Tecnologico De C.F.E. Mexico City, D.F., Mexico	Lectures Sundays Science	Every Sunday a scientist shares research or knowledge of particular topic.	13800	All Ages/Gen Aud.	Lectures, Demos
Discovery Museum Essex Junction, Vermont	Loan Kits-Curriculum Aids	Loan kits range from dinosaur kits to bicycles.	6000	Preschool-Gr. 12	Outreach
The Natural Science Center of Greensboro Greensboro, North Carolina	Museum Apprenticeship	College students receive 3 hours' credit for working at the museum.	5	College	Internships
The Science Place Dallas, Texas	Museum Enrichment Program	Hands-on science projects, interaction with museum exhibits.	250	Preschoolers	Classes, Workshops
The Chicago Academy of Sciences Chicago, Illinois	Museum Overnights	Each overnight session has different theme--chemistry, nocturnal adaptations, etc.	200	Elementary	Camp-in
Museum of the Rockies Bozeman, Montana	Natural History Field Course for Kids	Students work with professionals performing natural history field work.	32	Elem thru Jr Hi	Field Trips, Studies
Carter House Science Museum Redding, California	Northern Calif Science Fair	Exhibits for K-9, Olympiad for 10-12th graders.	400	Elem thru Hi Sch	Special Events

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SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
Omniplex Science Museum Oklahoma City, Oklahoma	Omniplex Museum Adventures	Participatory labs designed to help teachers meet State Dept. of Ed. goals.	21484	Teachers	Teacher Training
Omniplex Science Museum Oklahoma City, Oklahoma	Omniplex Museum Apprentice Program	Volunteer internship for high school students -- academic credit available.	26	High School	Internships
Ontario Science Centre Don Mills, Ontario, Canada	Ontario Science Centre Science School	One-semester enrichment course for students in last year of high school.	53	High School	Classes, Workshops
Ontario Science Centre Don Mills, Ontario, Canada	Oscott	Weekend and vacation workshops for young people.	2000	Preschool-Gr. 12	Classes, Workshops
Science Center of Iowa Des Moines, Iowa	Outreach Demonstration Program	Outreach demos travel throughout state.	8068	Elem thru Hi Sch	Outreach
Museum of Scientific Discovery Harrisburg, Pennsylvania	P.A.C.T. (Parents and Children Together)	Parents and preschoolers explore topic together.	225	Preschoolers	Classes, Workshops
Jacksonville Museum of Arts & Science Jacksonville, Florida	Parent's Morning Out/Children's Workshop	Four-hour program--dinosaurs, terrariums, puppets, kits, etc.	100	Children	Classes, Workshops
Thames Science Center New London, Connecticut	Project Scienceskills	Eight hands-on teacher-training workshops.	19	Teachers	Teacher Training
Museum of Science Boston, Massachusetts	Public Demos, Interpretations & Discovery Spaces	Interpretation of traveling exhibits and discovery spaces.	1000000	All Ages/Gen Aud.	Lectures, Demos
Springfield Science Museum Springfield, Massachusetts	Reptiles	Investigation of reptile behavior and characteristics, live snakes and turtles.	3500	Elementary	Classes, Workshops
Deutsches Museum Munich, West Germany	Research Games	Highlights of the Deutsches Museum are shown to students.	7200	Elem thru Jr Hi	Guided Tours
Museum of Science Boston, Massachusetts	Saturday Education Courses Program	Science classes and mini-courses.	785	Elem thru Jr Hi	Classes, Workshops

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SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
The Discovery Center Fresno, California	School Visit Program	Students explore hands-on exhibits, some outdoor activities and exhibits.	14000	Preschool-Gr. 12	Guided Tours
Museum of Science Boston, Massachusetts	School Visits Program	Forty-five minute classroom or theater program.	232000	Elem thru Hi Sch	Classes, Workshops
South Florida Science Museum West Palm Beach, Florida	School for Exploring Science	Summer science enrichment program.	500	Elementary	Classes, Workshops
Science Center of Iowa Des Moines, Iowa	Science Center Preschool	Provides preschool instruction and care in addition to science enrichment.	72	Preschoolers	Classes, Workshops
Nehru Science Centre Bombay, Maharashtra, India	Science Film Festivals	Schools can select films to be shown on various topics.	0	Elem thru Hi Sch	Films, Shows
Impression 5 Science Museum Lansing, Michigan	Science Initiatives '87	Conduct experiments using museum exhibits.	2000	Elementary	Classes, Workshops
Museum of Science & Industry Tampa, Florida	Science Olympics	Serve as host for school district personnel program.	1500	Elem thru Jr Hi	Special Events
Nehru Science Centre Bombay, Maharashtra, India	Science Quiz Contests	Quiz contest forum allows students from various schools to compete on science knowledge.	400	High School	Classes, Workshops
New England Science Center Worcester, Massachusetts	Science Sleuth	Girl Scouts conduct experiments to earn merit badge.	300	Females	Classes, Workshops
National Taiwan Science Education Centre Taipei, Taiwan, Rep. of China	Science Study Programs	Science activities, research methods.	25	Children	Classes, Workshops
Catawba Science Center Hickory, North Carolina	Science Teacher Workshops	Certificate renewal credit with regional university.	76	Teachers	Teacher Training
Science Discovery Center of Tompkins Co. Ithaca, New York	Science and Art for Preschool	Arts and crafts activities at day-care home or center, materials provided.	125	Preschoolers	Classes, Workshops

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SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
Buhl Science Center Pittsburgh, Pennsylvania	Science and Engineering Fair	Local scientists judge students' projects.	450	Jr Hi thru Hi Sch	Special Events
Ontario Science Centre Don Mills, Ontario, Canada	Science behind Headlines	Public programs related to current issues in science.	2000	All Ages/Gen Aud.	Lectures, Demos
The Children's Museum Boston, Massachusetts	Science for School Teachers	In-depth training in science provided through hands-on activities.	20	Teachers	Teacher Training
Ontario Science Centre Don Mills, Ontario, Canada	Science for Seniors	Public program topics for a senior audience.	200	Senior Citizens	Classes, Workshops
Nagoya Municipal Science Museum Nagoya, Japan	Scientific Film Show	Films on technology, science education, and animation are presented.	2947	All Ages/Gen Aud.	Films, Shows
Singapore Science Centre Singapore, Republic of Singapore	Singapore Youth Science Fortnight	Varied science activities offered over a two-week period.	100000	Elem thru Hi Sch	Camp-in
Sacramento Science Center & Junior Museum Sacramento, California	SMART (Scientific Methods and Resources Training)	Two curriculum series consisting of 4 manuals each, hands-on activities.	200	Teachers	Teacher Training
The Academy of Natural Sciences Philadelphia, Pennsylvania	Smith-Kline Beckman's Summer "Potentials" Program	Summer science enrichment program for gifted but disadvantaged students.	28	High School	Classes, Workshops
Museum of History & Science Louisville, Kentucky	Snore with a Dinosaur	Families "camp-in" museum, do activities and workshops together.	150	Families	Camp-in
California Museum of Science & Industry Los Angeles, California	Space-Science Teacher Workshop	A variety of basic science topics.	80	Teachers	Teacher Training
Nagoya Municipal Science Museum Nagoya, Japan	Special Exhibition	Equipment and/or uncommon objects on a particular theme are on exhibit for 10 days.	24000	All Ages/Gen Aud.	Classes, Workshops
Florida Museum of Science Miami, Florida	Spring Fling	Hands-on science classes and activities.	70	Preschool-Gr. 12	Classes, Workshops

**EDUCATIONAL PROGRAMS**  
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SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
The Children's Museum Boston, Massachusetts	Staff Training for Community Agencies	Low-income communities targeted for science, arts & crafts training.	320	Low Income	Classes, Workshops
Sacramento Science Center & Junior Museum Sacramento, California	STEAM Internship	Teachers work alongside science center staff, develop resource kits.	6	Teachers	Internships
Nehru Science Centre Bombay, Maharashtra, India	Students' Science Seminar	Students from various schools compete to express views on topics.	0	Elem thru Hi Sch	Classes, Workshops
Missouri Botanical Garden St. Louis, Missouri	Suitcase Science	Outreach materials and lesson plans are on loan to teachers.	4213	Teachers	Outreach
The Discovery Museums Acton, Massachusetts	Summer Discoveries	Two-week session of 2-hour workshops on arts, humanities, and the sciences.	40	Elementary	Classes, Workshops
Museum of Science Miami, Florida	Summer Science Camps	Day camp environment of science activities.	1200	Preschool-Gr. 12	Classes, Workshops
Nature Science Center Winston-Salem, North Carolina	Summer Science Day Camp	Take-home projects and science programs.	100	Elementary	Classes, Workshops
Cumberland Museum and Science Center Nashville, Tennessee	Summer Science Day Camps	Educational enrichment, day care option.	700	Elem thru Jr Hi	Classes, Workshops
The Discovery Center Fresno, California	Summer Science Workshops	Students explore hands-on exhibits, some outdoor activities and exhibits.	427	Preschool-Gr. 12	Classes, Workshops
Ohio's Center of Science and Industry Columbus, Ohio	Summer Workshops	Science activities followed up by make-it and take-it kit materials.	0	Children	Classes, Workshops
The Science Place Dallas, Texas	Summersearch	Flexible, hands-on science programs available on 30 subjects.	1100	Preschool-Gr. 12	Classes, Workshops
New Jersey State Museum Trenton, New Jersey	Sunday Science Lecture Series	Professional, amateur scientists share expertise with public.	1300	All Ages/Gen Aud.	Lectures, Demos

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SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
Museum of Scientific Discovery Harrisburg, Pennsylvania	Super Science Summer	Eight weeks of programming on topics such as dirt, spiders, noses.	1600	Preschool-Gr. 12	Classes, Workshops
New Jersey State Museum Trenton, New Jersey	Super Science Weekend	Two-day celebration of science activities and continuous programs.	5000	All Ages/Gen Aud.	Special Events
Louisiana Science Centre & IMAX Theatre New Orleans, Louisiana	TIPS (Techniques in Participatory Science)	Field trips and outreach programs for teachers.	100	Teachers	Teacher Training
The Space Center Alamogordo, New Mexico	Teacher Newsletter	Monthly newsletter to teachers provides resource materials, promotes museum programs.	100	Teachers	Outreach
The Children's Museum Boston, Massachusetts	Teacher Seminars	Daylong seminars on the museum's specialties.	253	Teachers	Classes, Workshops
Museum of Scientific Discovery Harrisburg, Pennsylvania	Teacher Training	Create project samples, take home activity write-ups.	250	Teachers	Teacher Training
Museum of Science & Industry Tampa, Florida	Teacher Training Workshops	Hands-on activities related to exhibit content areas.	120	Teachers	Teacher Training
The Discovery Museums Acton, Massachusetts	Teacher Workshops	A pilot program offering curriculum suggestions through exploration of materials.	25	Teachers	Teacher Training
The Children's Museum of Houston Houston, Texas	Teacher's Night	Teachers are briefed on museum's offerings, given educ. materials.	360	Teachers	Special Events
Jacksonville Museum of Arts & Science Jacksonville, Florida	Teaching within the Museum Environment	Shows how to prepare students for museum visit, how to approach subject matter.	100	Teachers	Teacher Training
Nagoya Municipal Science Museum Nagoya, Japan	The Club of Science Museum	Two scientific handicraft clubs and an astronomy club offer science activities.	2944	Elem thru Jr Hi	Science Clubs

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SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
Nature Science Center Winston-Salem, North Carolina	(Untitled)	Free programs, such as Science Showtime, Lasers & Lights, Live Animal Interviews.	48518	All Ages/Gen Aud.	Lectures, Demos
South Florida Science Museum West Palm Beach, Florida	Wee Wonders	Week-long, half-day program includes hands-on activities.	120	Kindergarten	Classes, Workshops
The Academy of Natural Sciences Philadelphia, Pennsylvania	Women in Natural Sciences (WINS)	Science enrichment program for girls from single-parent homes.	23	Females	Classes, Workshops
Eastern Washington Science Center Cheney, Washington	Workshop for Primary Grade Teachers	Teachers are shown how to capitalize on exhibits for effective science teaching.	5	Teachers	Teacher Training
Science Museum of Virginia Richmond, Virginia	Workshops, Classes, Special Programs	Year-round offering of science and/or computer classes for individuals or families.	600	All Ages/Gen Aud.	Classes, Workshops
Ohio's Center of Science and Industry Columbus, Ohio	Young Experimental Scientist (YES)	Daylong workshop/enrichment program at the museum.	3500	Other	Classes, Workshops

**THEME: MATHEMATICS**

Oregon Museum of Science & Industry Portland, Oregon	Ask Center/Neighborhood Science Class	Low-income or minority children learn science and math through museum clubs.	150	Low Income	Science Clubs
California Museum of Science & Industry Los Angeles, California	Calif Science Theater Company	Short plays on space program, nutrition, math involve audience in exhibits.	35000	Elem thru Hi Sch	Performing Arts
The Chicago Academy of Sciences Chicago, Illinois	Ecological Citizenship	Hands-on environmental education.	1600	Elem thru Jr Hi	Classes, Workshops
Lawrence Hall of Science Berkeley, California	Equals, Equals in Computer Technology, Family Math	EQUALS promotes participation of females and minorities in math and computer education.	7975	Minorities	Classes, Workshops
Oregon Museum of Science & Industry Portland, Oregon	Exhibit Enhancement thru Programs	Explainers, specialists interact with visitors to enrich exhibit experience.	500000	All Ages/Gen Aud.	Lectures, Demos

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SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
Insights--El Paso Science Center El Paso, Texas	Explore New Horizons	Teachers compete to teach 3-week summer courses at local university.	24	Mdl Sc/Jr Hi	Classes, Workshops
Pacific Science Center Seattle, Washington	In-house Offerings (demos, exhibits, guided activities)	Participants interact with real objects, guided activities.	88981	Elem thru Hi Sch	Classes, Workshops
Museum of Science Miami, Florida	Kids N' Bits	Five pairs parent/child teams per class learn problem-solving skills.	50	Kindergarten	Classes, Workshops
Lawrence Hall of Science Berkeley, California	MESA (Math, Engineering, Science Achievement)	Prepares minority students for math-based majors.	7828	Minorities	Career Workshops
Jacksonville Museum of Arts & Science Jacksonville, Florida	M.U.S.E. Boxes (Museum Units Supplementing Educ.)	Traveling mini-exhibits on various subjects for classroom use.	50000	Elementary	Outreach
Pacific Science Center Seattle, Washington	Science Celebration	Two-hour workshops on specific subjects, take home materials with tips for parents.	6600	Preschool-Gr. 12	Classes, Workshops
Fernbank Science Center Atlanta, Georgia	Scientific Tools and Techniques	Students spend quarter of the year in scientific study at the museum.	180	High School	Classes, Workshops
Singapore Science Centre Singapore, Republic of Singapore	Singapore Youth Science Fortnight	Varied science activities offered over a two-week period.	100000	Elem thru Hi Sch	Camp-in
The Science Place Dallas, Texas	Summersearch	Flexible, hands-on science programs available on 30 subjects.	1100	Preschool-Gr. 12	Classes, Workshops
Louisiana Science Centre & IMAX Theatre New Orleans, Louisiana	TIME (Techniques in Math Education)	Continuing education for teachers.	100	Teachers	Teacher Training
The Academy of Natural Sciences Philadelphia, Pennsylvania	Women in Natural Sciences (WINS)	Science enrichment program for girls from single-parent homes.	23	Females	Classes, Workshops
Discovery Hall Austin, Texas	THEME: GENERAL PHYSICS After-School Science	Make friends, learn about science after school.	563	Elementary	Classes, Workshops

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SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
Cumberland Museum and Science Center Nashville, Tennessee	Air & Flight Event Weekend	Paper plane contest, kit building and flying, boomerang demos, frisbees, hot air balloons.	900	Families	Special Events
Centre for Educational Museums Bangkok, Thailand	Computer for Education	Work with school districts to provide computer training for secondary students.	3	High School	Classes, Workshops
The Children's Museum Boston, Massachusetts	Designing Playful Educational Experiences	Semester science course for teachers, credited through Lesley College.	8	Teachers	Teacher Training
Midland Center for the Arts Midland, Michigan	Discover Computers! Discover Legos!	Evening computer and LEGO classes for the mentally impaired.	12	Disabled	Classes, Workshops
Discovery Hall Austin, Texas	Discovery Camp	Week-long sessions on various topics.	633	Elementary	Classes, Workshops
Milwaukee Public Museum Milwaukee, Wisconsin	Discovery Units	Activity boxes can be purchased by visitor or used at museum.	50000	All Ages/Gen Aud.	Outreach
Midland Center for the Arts Midland, Michigan	Discovery! in a Suitcase	Outreach to school children with handicaps.	60	Children	Outreach
Museum of History & Science Louisville, Kentucky	Elemental Explorations	Summer workshops on air, wind, water, fire, world.	120	Elem thru Jr Hi	Classes, Workshops
Museum of Science & Industry Tampa, Florida	Explainer Program	Students are paid to operate exhibits, do programs.	15	High School	Explainers
Exploratorium San Francisco, California	Exploratorium Teacher Institute	Intensive summer and after-school workshops using the exhibit-based curriculum.	300	Teachers	Teacher Training
The Science Place Dallas, Texas	Exploring the Science Place (ESP)	Sleepover for area youth ages features science activities.	7000	Elem thru Jr Hi	Camp-in
Science Museum of Virginia Richmond, Virginia	Fun with Physics Program	Audience participates in 45-minute demo of scientific laws.	2112	Elem thru Hi Sch	Lectures, Demos

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SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
The Natural Science Center of Greensboro Greensboro, North Carolina	Greensboro Public Schools (GPS) Contract	Programs based on school curriculum.	3200	Elem thru Hi Sch	Classes, Workshops
Midland Center for the Arts Midland, Michigan	Hands On! Minds On!	Participatory program on light, magnetism, electricity.	48	Elementary	Lectures, Demos
Deutsches Museum Munich, West Germany	Hands-on Experiments in Physics	High school students conduct physics experiments.	0	High School	Classes, Workshops
Pacific Science Center Seattle, Washington	Inhouse Offerings (demos, exhibits, guided activities)	Participants interact with real objects, guided activities.	88981	Elem. thru Hi Sch	Classes, Workshops
The Science Museum of Minnesota St. Paul, Minnesota	Inventors' Fair	Creative problem-solving, 5-7 students' invention selected for display.	107	Elem thru Jr Hi	Special Events
Discovery Hall Austin, Texas	Mentor Program	Students work in small groups to learn about exhibits, do experiments, etc.	30	Elementary	Classes, Workshops
Lawrence Hall of Science Berkeley, California	MESA (Math, Engineering, Science Achievement)	Prepares minority students for math-based majors.	7828	Minorities	Career Workshops
The Natural Science Center of Greensboro Greensboro, North Carolina	Morning Television Programs	Two-and-a-half minute segments on science education	9360000	All Ages/Gen Aud.	Radio, TV
The Science Place Dallas, Texas	Museum Enrichment Program	Hands-on science projects, interaction with museum exhibits.	250	Preschoolers	Classes, Workshops
The Science Museum of Minnesota St. Paul, Minnesota	OIS (Opportunities in Science)	School services to non-metro schools through workshops, newsletters, special events.	10000	Jr Hi thru Hi Sch	Outreach
Omniplex Science Museum Oklahoma City, Oklahoma	Omniplex Museum Adventures	Participatory labs designed to help teachers meet State Dept. of Ed. goals.	21484	Teachers	Teacher Training
Enbrook Institute of Science Farmington Hills, Michigan	One-Day Program	Students spend a full day working in one area of science.	2000	Elem thru Jr Hi	Classes, Workshops

**EDUCATIONAL PROGRAMS**  
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SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
Dutch Institute for Industry & Technology Amsterdam, The Netherlands	PC Workshop	Teachers learn how to start a computer workshop in their school.	200	Teachers	Teacher Training
South Florida Science Museum West Palm Beach, Florida	School for Exploring Science	Summer science enrichment program.	500	Elementary	Classes, Workshops
Pacific Science Center Seattle, Washington	Science Celebration	Two-hour workshops on specific subjects, take home materials with tips for parents.	600	Preschool-Gr. 12	Classes, Workshops
Museum of Science and Industry Chicago, Illinois	Science Club	Club meets every other Saturday, works on projects in museum lab space.	75	Jr Hi thru Hi Sch	Science Clubs
The Discovery Center Syracuse, New York	Science Workshops	Topics include biology, physical science, and chemistry.	1080	Elementary	Classes, Workshops
Cranbrook Institute of Science Bloomfield Hills, Michigan	Science at Cranbrook	Interactive, four-day program allows for in-depth experiences.	1300	Elementary	Classes, Workshops
Discovery Hall Austin, Texas	Special Interest Groups	Members come on Saturday to work on science projects.	20	Other	Science Clubs
Cranbrook Institute of Science Bloomfield Hills, Michigan	Teacher In-science	Half-day sessions with hands-on activities funded through STEAM.	300	Teachers	Teacher Training
Museum of Science & Industry Tampa, Florida	Teacher Training Workshops	Hands-on activities related to exhibit content areas.	120	Teachers	Teacher Training
Discovery Hall Austin, Texas	Teacher Workshops	Hands-on machines, electricity, magnetism, science fair.	300	Teachers	Teacher Training
Orlando Science Center Orlando, Florida	The Force that's with You	Visual demo presents basic physics principles.	5333	Jr Hi thru Hi Sch	Lectures, Demos
Nehru Science Centre Bombay, Maharashtra, India	Vacation Science Laboratory Classes	Two-week lab course, using tools, science apparatus.	500	High School	Classes, Workshops
Pitt Science Center Pittsburgh, Pennsylvania	Young Astronauts	Monthly science activities, field trips.	60	High School	Science Clubs

**EDUCATIONAL PROGRAMS**  
**Reported in Science-Center Data Survey**

SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
<b>THEME: PHYSICS/MECHANICS</b>					
The Franklin Institute Science Museum Philadelphia, Pennsylvania	Energy for the Fifth Grade	Subsidized visit program includes auditorium show and self-guided tour.	19000	Elementary	Guided Tours
The Franklin Institute Science Museum Philadelphia, Pennsylvania	Kids 3-6	Guided exhibit experience, computer lesson, planetarium show.	2984	Preschoolers	Classes, Workshops
Insights--El Paso Science Center El Paso, Texas	Scheduled Group Visits to Museum	Teachers bring their classes to museum for on-site learning.	6415	Preschool-Gr. 12	Guided Tours
Science World Vancouver, British Columbia, Canada	Science Roadshows	Outreach demos involve students and teachers.	26000	Elem thru Hi Sch	Outreach
Science World Vancouver, British Columbia, Canada	Science on a Shoestring	Teachers learn questioning techniques and do demos made from inexpensive materials.	200	Teachers	Teacher Training
Sacramento Science Center & Junior Museum Sacramento, California	STEAM Inservice	Series of 4 seven-week courses on various science topics.	112	Teachers	Teacher Training
Insights--El Paso Science Center El Paso, Texas	Van-in-Sight	Converted bookmobile with hands-on exhibits visits schools and community centers.	14377	All Ages/Gen Aud.	Outreach
<b>THEME: PHYSICS/FLUID MECHANICS</b>					
Reuben H. Fleet Science Center San Diego, California	Bubble Wonders!	Live demos on bubbles.	12000	Elementary	Lectures, Demos
<b>THEME: PHYSICS/ACOUSTICS</b>					
The Franklin Institute Science Museum Philadelphia, Pennsylvania	Energy for the Fifth Grade	Subsidized visit program includes auditorium show and self-guided tour.	19000	Elementary	Classes, Workshops
Exploratorium Francisco, California	Field Trip Pathways	Pathway through specific exhibits for part of a field trip program.	20000	Elem thru Jr Hi	Guided Tours

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SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
Exploratorium San Francisco, California	School in the Exploratorium (SITE)	Teacher training uses exhibits, intense work with teachers in classroom.	100	Teachers	Classes, Workshops
The Franklin Institute Science Museum Philadelphia, Pennsylvania	Science Auditorium Shows	Scientific equipment and props used to demonstrate science to large audience.	70000	All Ages/Gen Aud.	Lectures, Demos
Springfield Science Museum Springfield, Massachusetts	Sounds Like Fun	Hands-on investigation of the properties of sound.	15000	Elem thru Hi Sch	Classes, Workshops
THEME: PHYSICS/HEAT, THERMODYNAMICS					
Science Museum of Virginia Richmond, Virginia	Fun with Physics Program	Audience participates in 45-minute demo of scientific laws.	2112	Elem thru Hi Sch	Lectures, Demos
Insights--El Paso Science Center El Paso, Texas	Scheduled Group Visits to Museum	Teachers bring their classes to museum for on-site learning.	6415	Preschool-Gr. 12	Guided Tours
The Franklin Institute Science Museum Philadelphia, Pennsylvania	Science Auditorium Shows	Scientific equipment and props used to demonstrate science to large audience.	70000	All Ages/Gen Aud.	Lectures, Demos
The Franklin Institute Science Museum Philadelphia, Pennsylvania	Traveling Science Shows	"On the road" shows presented in the community by staff of five.	330000	All Ages/Gen Aud.	Outreach
THEME: PHYSICS/OPTICS (See also SOCIAL SCIENCES/PSYCHOLOGY)					
Pacific Science Center Seattle, Washington	Comet on Wheels	Outreach (portable planetarium) on astronomy, Halley's Comet.	100000	High School	Planetarium
Exploratorium San Francisco, California	Field Trip Pathways	Pathway through specific exhibits for part of a field trip program.	20000	Elem thru Jr Hi	Guided Tours
Orlando Science Center Orlando, Florida	Lights and Lenses	Program focuses on effects of natural light and man-made light in daily life.	9589	Elem thru Hi Sch	Classes, Workshops
Exploratorium San Francisco, California	School in the Exploratorium (SITE)	Teacher training uses exhibits, intense work with teachers in classroom.	100	Teachers	Teacher Training

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SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
Science World Vancouver, British Columbia, Canada	Science Roadshows	Outreach demos involve students and teachers.	26000	Elem thru Hi Sch	Outreach
Science World Vancouver, British Columbia, Canada	Science on a Shoestring	Teachers learn questioning techniques and demos made from inexpensive materials.	200	Teachers	Classes, Workshops
Insights-El Paso Science Center El Paso, Texas	Van-in-Sight	Converted bookmobile with hands-on exhibits visits schools and community centers.	14377	All Ages/Gen Aud.	Outreach
Science Museum of Virginia Richmond, Virginia	Workshops, Classes, Special Programs	Year-round offering of science and/or computer classes for individuals or families.	600	All Ages/Gen Aud.	Classes, Workshops

THEME: PHYSICS/ELECTRICITY AND MAGNETISM (See also TECHNOLOGY/ENERGY)

Museum of Art, Science & Industry Bridgeport, Connecticut	Bridgeport Schools - Science Teacher Orientation	Annual intensive orientation to new exhibits, programs, available.	165	Teachers	Guided Tours
Nagoya Municipal Science Museum Nagoya, Japan	Demonstration on the Exhibition Floors	TV studio, scanning electron microscope and radar, and other demos.	92000	All Ages/Gen Aud.	Lectures, Demos
Science Museum of Virginia Richmond, Virginia	Demonstrations	Presentations on sound and motion, air pressure, dinosaurs, and more.	0	All Ages/Gen Aud.	Lectures, Demos
National Museum of Natural Science Taichung, Taiwan, Republic of China	Electric Charge	Audience participates in demo of Van de Graaff generator.	0	All Ages/Gen Aud.	Lectures, Demos
Orlando Science Center Orlando, Florida	Electro-ganza	Hands-on experience with electrical inventions.	5745	Elem thru Hi Sch	Classes, Workshops
Muscum of History & Science Lisville, Kentucky	Elemental Explorations	Summer workshops on air, wind, water, fire, world.	120	Elem thru Jr Hi	Classes, Workshops

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SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
St. Louis Science Center St. Louis, Missouri	Encouraging Energy Education Mini-grant Program	Teachers can apply for money to purchase equipment on energy-related curriculum projects.	18	Teachers	Outreach
Buhl Science Center Pittsburgh, Pennsylvania	Outreach	Outreach for schools, fairs, malls.	20000	All Ages/Gen Aud.	Outreach
Science Station Cedar Rapids, Iowa	School Visit Program - Electromagnetism	Group visit to museum includes science activities, data retrieval sheets.	0	Elementary	Guided Tours
South Florida Science Museum West Palm Beach, Florida	Small Fry Science	Hands-on activities for one hour a week.	150	Preschoolers	Classes, Workshops
Sacramento Science Center & Junior Museum Sacramento, California	STEAM Inservice	Series of 4 seven-week courses on various science topics.	112	Teachers	Classes, Workshops
Jacksonville Museum of Arts & Science Jacksonville, Florida	Teaching within the Museum Environment	Shows how to prepare students for museum visit, how to approach subject matter.	100	Teachers	Teacher Training
Nagoya Municipal Science Museum Nagoya, Japan	The Club of Science Museum	Two scientific handicraft clubs and an astronomy club offer science activities.	2944	Elem thru Jr Hi	Science Clubs
Memphis Pink Palace Museum & Planetarium Memphis, Tennessee	Theater of Science - "The Great Electricity Show"	Traces history and uses of electricity. Tesla Coil, plasma generator.	7000	All Ages/Gen Aud.	Lectures, Demos
The Franklin Institute Science Museum Philadelphia, Pennsylvania	Traveling Science Shows	"On the road" shows presented in the community by staff of five.	330000	All Ages/Gen Aud.	Outreach
THEME: CHEMISTRY					
Impression 5 Science Museum Lansing, Michigan	8th Grade Gifted & Talented Chemistry Program	Students conduct experiments using lab equipment to solve simulated real life problems.	64	Mdl Sc/Jr Hi	Classes, Workshops
Pacific Science Center Seattle, Washington	Field Studies/Camps	Science, whale, and sailing camps are offered.	2890	Elem thru Hi Sch	Field Trips, Studies

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SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
The Children's Museum of Utah Salt Lake City, Utah	Frozen Bubbles	A series of experiments, introducing visitors to properties of gas.	50000	All Ages/Gen Aud.	Classes, Workshops
South Florida Science Museum West Palm Beach, Florida	Holiday Camps	Science enrichment program offered at seasonal school breaks.	120	Elementary	Classes, Workshops
Impression 5 Science Museum Lansing, Michigan	L.A.B.S. Chemistry Program	Students and parents learn about 5 areas of chemistry through hands-on methods.	50	Elem thru Jr H.	Classes, Workshops
Impression 5 Science Museum Lansing, Michigan	Museum Chemistry Class	Hands-on chemistry experiments, identify unknown compounds.	80	Elementary	Classes, Workshops
The Chicago Academy of Sciences Chicago, Illinois	Museum Overnighters	Each overnight session has different theme--chemistry, nocturnal adaptations, etc.	200	Elementary	Camp-in
The Science Museum of Minnesota St. Paul, Minnesota	OIS (Opportunities in Science)	School services to non-metro schools through workshops, newsletters, special events.	10000	Jr Hi thru Hi Sch	Outreach
Centre for Educational Museums Bangkok, Thailand	Petroleum	Students learn about energy conservation.	7	High School	Classes, Workshops
Oregon Museum of Science & Industry Portland, Oregon	Public Labs in the Museum	Interactive chemistry lab with activities selected by visitor.	4000	All Ages/Gen Aud.	Classes, Workshops
Museum of Science and Industry Chicago, Illinois	Science Club	Club meets every other Saturday, works on projects in museum lab space.	75	Jr Hi thru Hi Sch	Science Clubs
Nehru Science Centre Bombay, Maharashtra, India	Vacation Science Laboratory Classes	Two-week lab course, using tools, science apparatus.	500	High School	Classes, Workshops
THEME: ASTRONOMY					
The Kansas City Museum Kansas City, Missouri	"Wonders of the Night Sky" Planetarium Program	Introduction to solar system.	324	Preschoolers	Planetarium

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SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
Lakeview Museum of the Arts & Sciences Peoria, Illinois	A Parental Involvement Program in Elementary Astronomy	Students and parents attend planetarium lessons together, coincides with curriculum.	220	Families	Planetarium
California Academy of Sciences San Francisco, California	Activities Calendar	Rewarding evening and weekend activities.	3500	Adults-General	Classes, Workshops
National Taiwan Science Education Centre Taipei, Taiwan, Rep. of China	Astronomy Instruction	Visitors can view night sky to acquire knowledge of astronomy.	101	Children	Classes, Workshops
Pacific Science Center Seattle, Washington	Field Studies/Camps	Science, whale, and sailing camps are offered.	2890	Elem thru Hi Sch	Classes, Workshops
Science Museum of Virginia Richmond, Virginia	Joy from the World	Six-week event celebrates winter solstice.	22000	All Ages/Gen Aud.	Special Events
The Natural Science Center of Greensboro Greensboro, North Carolina	Morning Television Programs	Two-and-a-half minute segments on science education.	9360000	All Ages/Gen Aud.	Radio, TV
Jacksonville Museum of Arts & Science Jacksonville, Florida	M.U.S.E. Boxes (Museum Units Supplementing Educ.)	Traveling mini-exhibits on various subjects for classroom use.	50000	Elementary	Outreach
The Natural Science Center of Greensboro Greensboro, North Carolina	Museum Apprenticeship	College students receive 3 hours' credit for working at the museum.	5	College	Internships
St. Louis Science Center St. Louis, Missouri	Our Place in the Universe	Part of the metropolitan desegregation program, 6-week series of workshops.	360	Minorities	Classes, Workshops
Buhl Science Center Pittsburgh, Pennsylvania	Outreach	Outreach for schools, fairs, malls.	20000	All Ages/Gen Aud.	Outreach
Alberta Science Centre/Centennial Planetarium Calgary, Alberta, Canada	Planetarium School Show Evaluation and Revision	Teacher committees modify planetarium program to serve curriculum.	20000	Teachers	Planetarium

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SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
St. Louis Science Center St. Louis, Missouri	Project: Pulsar Curriculum Kits	Curriculum kits with interactive activities, slides, and posters at 3 grade levels.	2139	Teachers	Outreach
Nehru Science Centre Bombay, Maharashtra, India	Sky Observation Programs	Students meet to identify constellations, planets, via telescope.	0	All Ages/Gen Aud.	Classes, Workshops
Anniston Museum of Natural History Anniston, Alabama	Solar Eclipse Party	Study phenomenon, tools for viewing.	100	High School	Special Events
Springfield Science Museum Springfield, Massachusetts	Solar System	Visual experience is supplement to classroom curriculum.	20000	Elem thru Hi Sch	Classes, Workshops
New Jersey State Museum Trenton, New Jersey	Space Day	Planetarium programs, workshops, and demos on past and future human endeavors in space.	2500	All Ages/Gen Aud.	Lectures, Demos
Anniston Museum of Natural History Anniston, Alabama	Traveling Trunk Program	Kits filled with objects, a/v supplies, printed materials on loan	3000	Elem thru Hi Sch	Outreach
Nature Science Center Winston-Salem, North Carolina	(Untitled)	Free programs, such as Science Showtime, Lasers & Lights, Live Animal Interviews.	48518	All Ages/Gen Aud.	Lectures, Demos
Omniplex Science Museum Oklahoma City, Oklahoma	Visions of the Universe	Statewide art contest on astronomical fact and fantasy themes.	2050	Elem thru Hi Sch	Special Events
South Florida Science Museum West Palm Beach, Florida	Wee Wonders	Week-long, half-day program includes hands-on activities.	120	Kindergarten	Classes, Workshops
Buhl Science Center Pittsburgh, Pennsylvania	Young Astronauts	Monthly science activities, field trips.	60	High School	Science Clubs
Harrington Discovery Center Corrillo, Texas	Astronomy for Elementary Teachers	Methods for teaching astronomy to children are demonstrated.	20	Teachers	Classes, Workshops

THEME: Space Research and Exploration

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California Museum of Science & Industry Los Angeles, California	Calif. Science Theater Company	Short plays on space program, nutrition, math involve audience in exhibits.	35000	Elem thru Hi Sch	Performing Arts
National Air & Space Museum Washington, DC	Daily Tours of the Museum	Tours tailored to teachers' needs, tours available for disabled visitors.	23179	Elem thru Hi Sch	Guided Tours
Insights--El Paso Science Center El Paso, Texas	El Paso Comm. Coll./insights Summer Science Series	Saturday sessions at museum offer hands-on workshops in the sciences.	40	Elem thru Jr Hi	Classes, Workshops
Reuben H. Fleet Science Center San Diego, California	Palomar Observatory Behind-the-Scenes Tours	Observe night sky through 60" telescope, behind-scenes tour of Observatory.	270	All Ages/Gen Aud.	Guided Tours
National Air & Space Museum Washington, DC	Programs for Disabled Visitors	Tours, theater presentations, brochures and drawings for disabled visitors.	0	Disabled	Guided Tours
National Air & Space Museum Washington, DC	Public Inquiry Mail	Docents answer public requests for aerospace information.	2133	All Ages/Gen Aud.	Outreach
Red Mountain Museum Birmingham, Alabama	Science Career Day	Science field professionals demonstrate and talk about their careers.	100	Elem thru Hi Sch	Career Workshops
National Air & Space Museum Washington, DC	Science Teacher Education Workshops	Aerospace workshops provide materials, techniques.	0	Teachers	Teacher Training
The Space Center Alamogordo, New Mexico	Shuttle Camp 2001	Summer day-camp program with space theme, field trips to area research facilities.	140	Elem thru Jr Hi	Classes, Workshops
Louisiana Science Centre & IMAX Theatre New Orleans, Louisiana	Space Camp	Modeled after successful space camp in Huntsville, Ala.	500	Elem thru Jr Hi	Classes, Workshops
New Jersey State Museum Trenton, New Jersey	Space Day	Planetarium programs, workshops, and demos on past and future human endeavors in space.	2500	All Ages/Gen Aud.	Special Events

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SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
California Museum of Science & Industry Los Angeles, California	Space-Science Teacher Workshop	A variety of basic science topics.	80	Adults-General	Classes, Workshops
Reuben H. Fleet Science Center San Diego, California	Spaceweek Symposium	Free five-day symposium celebrates National Spaceweek.	1600	Adults-General	Special Events
Catawba Science Center Hickory, North Carolina	Spotlight on Science	Co-sponsored with local university to highlight science issues and trends.	320	All Ages/Gen Aud.	Lectures, Demos
THEME: Solar System					
The Kansas City Museum Kansas City, Missouri	"Wonders of the Night Sky" Planetarium Program	Introduction to solar system.	324	Preschoolers	Lectures, Demos
Pacific Science Center Seattle, Washington	Comet on Wheels	Outreach (portable planetarium) on astronomy, Halley's Comet.	100000	High School	Outreach
National Air & Space Museum Washington, DC	Daily Tours of the Museum	Tours tailored to teachers' needs, tours available for disabled visitors.	23179	Elem thru Hi Sch	Guided Tours
The Discovery Center Syracuse, New York	Evening under the Stars	Stargazing, live animal demos, outdoor concerts, etc.	700	All Ages/Gen Aud.	Special Events
Kalamazoo Public Museum Kalamazoo, Michigan	Exploring the Solar System	Introduces concepts of distance, motion, size, atmosphere, etc.	2835	Elementary	Planetarium
Lawrence Hall of Science Berkeley, California	GEMS (Great Explorations in Math and Science)	GEMS is publishing a selection of LHS's best science and math activities.	5000	Teachers	Outreach
Reuben H. Fleet Science Center San Diego, California	Palomar Observatory Behind-the-Scenes Tours	Observe night sky through 60" telescope, behind-scenes tour of Observatory.	270	All Ages/Gen Aud.	Guided Tours
South Florida Science Museum West Palm Beach, Florida	Small Fry Science	Hands-on activities for one hour a week.	150	Preschoolers	Classes, Workshops

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SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
The Academy of Natural Sciences Philadelphia, Pennsylvania	Smith-Kline Beckman's Summer "Potentials" Program	Summer science enrichment program for gifted but disadvantaged students.	28	High School	Classes, Workshops
Reuben H. Fleet Science Center San Diego, California	Spaceweek Symposium	Free five-day symposium celebrates National Spaceweek.	1600	Adults-General	Special Events
Museum of the Rockies Bozeman, Montana	Starlab Planetarium	Outreach offering planetarium programs and teacher training.	2500	All Ages/Gen Aud.	Planetarium
New York Hall of Science Corona, New York	Starlab Rental	Teacher training followed by rental of portable planetarium equipment.	100200	Teachers	Planetarium
THEME: Stars and Star Clusters					
Don Harrington Discovery Center Amarillo, Texas	Astronomy for Elementary Teachers	Methods for teaching astronomy to children are demonstrated.	20	Teachers	Teacher Training
Milwaukee Public Museum Milwaukee, Wisconsin	Discovery Units	Activity boxes can be purchased by visitor or used at museum.	50000	All Ages/Gen Aud.	Outreach
The Discovery Center Syracuse, New York	Evening under the Stars	Stargazing, live animal demos, outdoor concerts, etc.	700	All Ages/Gen Aud.	Special Events
Kalamazoo Public Museum Kalamazoo, Michigan	Kalamazoo Skyline	Emphasis on what can be seen in the night sky with modest equipment.	3200	All Ages/Gen Aud.	Classes, Workshops
Nagoya Municipal Science Museum Nagoya, Japan	Planetarium Program	One-hour programs about night sky and astronomy topics.	349585	All Ages/Gen Aud.	Planetarium
Lawrence Hall of Science Berkeley, California	Public Educational Programs	Discovery labs, participatory planetarium shows, theme exhibits.	250000	All Ages/Gen Aud.	Classes, Workshops
Eastern Washington Science Center Cheney, Washington	Science Center Outreach Program	Outreach program offering half-hour presentations.	5000	Elementary	Outreach
Museum of the Rockies Bozeman, Montana	Starlab Planetarium	Outreach offering planetarium programs and teacher training.	2500	All Ages/Gen Aud.	Outreach

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New York Hall of Science Corona, New York	Starlab Rental	Teacher training followed by rental of portable planetarium equipment.	100200	Teachers	Planetarium
Anniston Museum of Natural History Anniston, Alabama	THEME: EARTH SCIENCES Bahama Study Trip	Study and research oceanography, terrestrial life.	20	Adults-General	Field Trips, Studies
Oregon Museum of Science & Industry Portland, Oregon	Camp Programs	Outdoor experiences in natural/earth sciences.	1500	Families	Field Trips, Studies
Red Mountain Museum Birmingham, Alabama	Earth Science School Programs	Audiovisuals, demos, hands-on collections, guided tour of road cut to reveal geologic history.	4000	Elem thru Jr Hi	Lectures, Demos
Schiele Museum of Natural History Gastonia, North Carolina	Earth/Life/Space Science	Study sheets relate exhibits to school curriculum.	18068	Elem thru Jr Hi	Classes, Workshops
Schiele Museum of Natural History Gastonia, North Carolina	Earthmagic - Week of the Young Earthling	Characters represent water, animals, plants, and explain their importance.	2200	Elementary	Performing Arts
Louisiana Science Centre & IMAX Theatre New Orleans, Louisiana	Energy Source	Energy conservation curriculum used in schools, field trips, outreach.	0	Elem thru Jr Hi	Outreach
Museum of History & Science Louisville, Kentucky	Falls of Ohio: Our Special Site	Visit museum exhibits and field site.	4489	Elem thru Jr Hi	Guided Tours
The Academy of Natural Sciences Philadelphia, Pennsylvania	George Washington Carver Summer Scholars Program	Nonwinners of science fair project get free one-week summer science program.	16	Elem thru Hi Sch	Classes, Workshops
The Chicago Academy of Sciences Chicago, Illinois	Group Programs	Programs complement Chicago Board of Educ. curriculum.	20000	Preschool-Gr. 12	Guided Tours
Centre for Educational Museums Bangkok, Thailand	Rocks and Minerals	Six secondary schools participate in the program.	2	High School	Classes, Workshops

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SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
Virginia Living Museum Newport News, Virginia	Science Safaris	Students join staff biologists for lab/field investigations of ecosystems.	275	High School	Field Trips, Studies
Virginia Living Museum Newport News, Virginia	Summer Field Schools	Five-day science expeditions to habitats, students set up base camp.	50	Mdl Sc/Jr Hi	Field Trips, Studies
Anniston Museum of Natural History Anniston, Alabama	Traveling Trunk Program	Kits filled with objects, A/V supplies, printed materials on loan.	3000	Elem thru Hi Sch	Outreach
The Children's Museum of Houston Houston, Texas	Weeklong Science Camp	Weeklong science camp focuses on science process skills.	60	Elem thru Jr Hi	Classes, Workshops
THEME: EARTH SCIENCES/METEOROLOGY					
Oregon Museum of Science & Industry Portland, Oregon	Camp Programs	Outdoor experiences in natural/earth sciences.	1500	Families	Classes, Workshops
Lawrence Hall of Science Berkeley, California	Public Educational Programs	Discovery labs, participatory planetarium shows, theme exhibits.	250000	All Ages/Gen Aud.	Classes, Workshops
National Air & Space Museum Washington, DC	Public Inquiry Mail	Docents answer public requests for aerospace information.	2133	All Ages/Gen Aud.	Outreach
Eastern Washington Science Center Cheney, Washington	Science Center Outreach Program	Outreach program offering half-hour presentations.	5000	Elementary	Outreach
THEME: EARTH SCIENCES/GEOLOGY (See also TECHNOLOGY/ENERGY, POWER PRODUCTION)					
Schiele Museum of Natural History Gastonia, North Carolina	Carolina Fossil Fair	Displays of regional fossils, hands-on Mini-Fossil Hunt.	6000	All Ages/Gen Aud.	Special Events
Schiele Museum of Natural History Gastonia, North Carolina	Catawba History Study Tour	Interpretive tour of replicated Catawba Indian site.	2771	All Ages/Gen Aud.	Guided Tours

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The Oakland Museum Oakland, California	Docent-Led Natural Science Gallery Tours	Tours along representative transection of California ecosystems.	13004	Other	Guided Tours
The Oakland Museum Oakland, California	Docent/Advanced Docent Training Classes	Docents enroll in two-semester ecology course, then semester on exhibits and tour techniques.	120	Other	Classes, Workshops
Red Mountain Museum Birmingham, Alabama	Earth Science School Programs	Audiovisuals, demos, hands-on collections, guided tour of road cut to reveal geologic history.	4000	Elem thru Jr Hi	Lectures, Demos
Schiele Museum of Natural History Gastonia, North Carolina	Earth/Life/Space Science	Study sheets related exhibits to school curriculum.	18068	Elem thru Jr Hi	Classes, Workshops
Chicago Botanic Garden Glencoe, Illinois	Graduate Teacher Educ Courses	Collaborative program with National College of Educators.	25	Teachers	Classes, Workshops
Museum of Natural History Lawrence, Kansas	Loan Kits	Text, slides, filmstrips, actual specimens.	27090	All Ages/Gen Aud.	Outreach
Alfred P. Sloan Jr. Museum Flint, Michigan	Mastodons & Mammoths	Centers on mastodon exhibit.	1000	Elem thru Hi Sch	Guided Tours
St. Louis Science Center St. Louis, Missouri	Our Place in the Universe	Part of the metropolitan desegregation program, 6-week series of workshops.	360	Minorities	Classes, Workshops
Centre for Educational Museums Bangkok, Thailand	Rocks and Minerals	Six secondary school participate in the program.		High School	Classes, Workshops
The Chicago Academy of Sciences Chicago, Illinois	Tandem Tours: CAS and CHS	Studies natural history of Chicago's 1,200 acre Lincoln Park.	250	Jr Hi thru Hi Sch	Field Trips, Studies
Schiele Museum of Natural History Gastonia, North Carolina	THEME: EARTH SCIENCES/GEOGRAPHY  Carolina Fossil Fair	Displays of regional fossils, hands-on Mini-Fossil Hunt.	6000	All Ages/Gen Aud.	Special Events

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SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
Indiana State Museum Indianapolis, Indiana	Magnificent Urban Voyaging	Teaches map skills, how to read compass and map.	270	Elementary	Classes, Workshops
Lawrence Hall of Science Berkeley, California	Math Science Technology Institute (MSTI)	A month-long residential institute for California math and science teachers.	200	Teachers	Internships
The Chicago Academy of Sciences Chicago, Illinois	Tandem Tours.CAS and CHS	Studies natural history of Chicago's 1,200 acre Lincoln Park.	250	Jr Hi thru Hi Sch	Field Trips, Studies
THEME: EARTH SCIENCES/PALEONTOLOGY					
Alfred P. Sloan Jr. Museum Flint, Michigan	Dinosaur Days	Temporary show of 6 dinosaurs amid appropriate flora.	87000	All Ages/Gen Aud.	Special Events
Springfield Science Museum Springfield, Massachusetts	Dinosaurs	Hands-on investigation of dinosaurs.	3700	Elementary	Classes, Workshops
Museum of History & Science Louisville, Kentucky	Falls of Ohio. Our Special Site	Visit museum exhibits and field site.	4489	Elem thru Jr Hi	Guided Tours
Lawrence Hall of Science Berkeley, California	Math Science Technology Institute (MSTI)	A month-long residential institute for California math and science teachers.	200	Teachers	Internships
Memphis Pink Palace Museum & Planetarium Memphis, Tennessee	Puppets- "Animal Crackers" & "The Dinah Saur Show"	Use of puppets to introduce concept of vertebrates, paleontology.	20000	Elementary	Performing Arts
New Jersey State Museum Trenton, New Jersey	South Dakota Field Experience	College credit for field experience on paleontological techniques.	0	College	Field Trips, Studies
Red Mountain Museum Birmingham, Alabama	Summer Paleontological Ligs	Four one-week sessions with paleontologist.	100	Adults-General	Field Trips, Studies
Sacramento Science Center & Junior Museum Sacramento, California	TOPS (Traveling One Person Show)	Outreach program makes use of the science center's collections.	36000	Elem thru Hi Sch	Outreach

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SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
New Jersey State Museum Trenton, New Jersey	THEME: Dinosaurs Dino-Safari...Especially for Kids	Stage presentation of time-machine journey into world of dinosaurs.	950	Families	Performing Arts
California Academy of Sciences San Francisco, California	THEME: NATURAL HISTORY, LIFE SCIENCES (See also BIOLOGY) Activities Calendar	Rewarding evening and weekend activities.	3500	Adults-General	Classes, Workshops
Bell Museum of Natural History Minneapolis, Minnesota	Avian Architecture	Manipulate bird parts to see how they work.	300	Elem thru Jr Hi	Classes, Workshops
Anniston Museum of Natural History Anniston, Alabama	Bahama Study Trip	Study and research oceanography, terrestrial life.	20	Adults-General	Field Trips, Studies
Schiele Museum of Natural History Gastonia, North Carolina	Catawba History Study Tour	Interpretive tour of replicated Catawba Indian site.	2771	All Ages/Gen Aud.	Guided Tours
Missouri Botanical Garden St. Louis, Missouri	Chautauqua Short Course for Teachers of Science	Accredited workshop on environmental biology and ecology.	30	Teachers	Classes, Workshops
Bell Museum of Natural History Minneapolis, Minnesota	Children's Hospital Programs	Outreach program.	160	Children	Outreach
Bell Museum of Natural History Minneapolis, Minnesota	Critters a La Cart	Public can touch skins, skulls, etc. Dissection/skinning demos.	5000	All Ages/Gen Aud.	Lectures, Demos
Red Mountain Museum Birmingham, Alabama	Dinosaur Program	Audio-visuals, hands-on artifacts and demos, and tour of dinosaur gallery.	6000	Elementary	Classes, Workshops
Anniston Museum of Natural History Anniston, Alabama	Discovery Days	Focus on natural history appreciation.	75	Elem thru Jr Hi	Classes, Workshops
Santa Barbara Museum Of Natural History Santa Barbara, California	Discovery Lab	Hands-on artifacts and specimens, activities.	8000	All Ages/Gen Aud.	Guided Tours

**EDUCATIONAL PROGRAMS**  
**Reported in Science-Center Data Survey**

SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
St. Louis Science Center St. Louis, Missouri	Discovery Room	Hands-on experience with exhibits and artifacts.	58733	Elementary	Classes, Workshops
Cranbrook Institute of Science Bloomfield Hills, Michigan	Discovery Room	Families explore hands-on exhibits in natural history areas.	7000	Families	Guided Tours
Santa Barbara Museum Of Natural History Santa Barbara, California	Docent-Guided Tours	Close interaction with docent, only 5-8 students per docent.	8000	Elementary	Guided Tours
Virginia Living Museum Newport News, Virginia	Early Birds	Nine-month nature education course.	72	Preschoolers	Classes, Workshops
Missouri Botanical Garden St. Louis, Missouri	Eco-Act	High school students receive school credit to teach environmental ed. to children.	17461	High School	Explainers
Vermont Institute of Natural Science Woodstock, Vermont	Ecology Overnights	Hands-on environmental education, social interaction for teachers/students.	150	Elementary	Camp-in
Vermont Institute of Natural Science Woodstock, Vermont	ELF (Environmental Learning for the Future)	Teacher training in natural history/environmental education.	5056	Other	Classes, Workshops
Springfield Science Museum Springfield, Massachusetts	Guided Tour	Tour of museum's major exhibit areas.	20000	Elem thru Hi Sch	Guided Tours
Virginia Living Museum Newport News, Virginia	In-school Programs	Outreach program offers nature education presentations.	25000	Elementary	Outreach
Cranbrook Institute of Science Bloomfield Hills, Michigan	Kindergarten Program	Four sessions, each one hour long, highlight birds, mammals, Indians, Discovery Room.	1100	Elementary	Classes, Workshops
Museum of Natural History Lawrence, Kansas	Loan Kits	Text, slides, filmstrips, actual specimens.	27090	All Ages/Gen Aud.	Outreach
Alfred P. Sloan Jr. Museum Flint, Michigan	Mastodons & Mammoths	Centers on mastodon exhibit.	1000	Elem thru Hi Sch	Guided Tours

**EDUCATIONAL PROGRAMS**  
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SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
Vermont Institute of Natural Science Woodstock, Vermont	Monthly Half-hour Radio Programs	Programs present range of natural history topics, environmental concerns.	0	All Ages/Gen Aud.	Radio, TV
Cranbrook Institute of Science Bloomfield Hills, Michigan	One-Day Program	Students spend a full day working in one area of science.	2000	Elem thru Jr Hi	Classes, Workshops
Orlando Science Center Orlando, Florida	Reptiles and Amphibians of Florida	In-depth study of amphibians indigenous to Florida.	0	Elementary	Classes, Workshops
Vermont Institute of Natural Science Woodstock, Vermont	Residential Teacher Workshops	Two day/night course with lectures, hands-on activities, field trips.	30	Teachers	Teacher Training
Santa Barbara Museum Of Natural History Santa Barbara, California	Science Adventures - Classes in Natural History	Learn ecological principles through hands-on activities and use of museum resources.	500	All Ages/Gen Aud.	Classes, Workshops
Cranbrook Institute of Science Bloomfield Hills, Michigan	Science at Cranbrook	Intensive, four-day program allows for in-depth experiences.	1300	Elementary	Classes, Workshops
The Children's Museum Boston, Massachusetts	Science for School Teachers	In-depth training in science provided through hands-on activities.	20	Teachers	Classes, Workshops
South Florida Science Museum West Palm Beach, Florida	Senior Citizen's Science Seminars	Monthly lectures, usually pertaining to museum's current exhibit.	500	Senior Citizens	Lectures, Demos
The Children's Museum Boston, Massachusetts	Staff Training for Community Agencies	Low-income communities targeted for science, arts & crafts training.	320	Low Income	Classes, Workshops
Georgia Southern Museum Statesboro, Georgia	Summer Adventure Camp	Day camp centered on exhibits at museum includes several field trips.	75	High School	Field Trips, Studies
Carter House Science Museum Redding, California	Summer Naturalist Program	Labs, speakers, activities, highlight environmental education themes.	250	Elementary	Classes, Workshops
Ed Mountain Museum Birmingham, Alabama	Summer Paleontological Digs	Four one-week sessions with paleontologist.	100	Adults-General	Field Trips, Studies

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Carter House Science Museum Redding, California	Summer Science Classes	Community volunteers teach natural science classes.	75	Elem thru Jr Hi	Classes, Workshops
Museum of Natural History Lawrence, Kansas	Summer Workshops for Young People	Field trips, week-long classes.	682	Elem thru Jr Hi	Field Trips, Studies
Cranbrook Institute of Science Bloomfield Hills, Michigan	Teacher In-science	Half-day sessions with hands-on activities funded through STEAM.	300	Teachers	Teacher Training
Museum of Natural History Lawrence, Kansas	Teacher Workshops	In-service credit for learning new approaches to teaching science.	231	Teachers	Teacher Training
Sacramento Science Center & Junior Museum Sacramento, California	TOPS (Traveling One Person Show)	Outreach program makes use of the science center's collections.	36000	Elem thru Hi Sch	Outreach
Vermont Institute of Natural Science Woodstock, Vermont	Touring Natural History Programs	Outreach presentations, some using live animals.	14389	All Ages/Gen Aud.	Outreach
Museum of Natural History Lawrence, Kansas	Weekend Workshops	Field trips, activities, hands-on experiences.	822	All Ages/Gen Aud.	Classes, Workshops
Bell Museum of Natural History Minneapolis, Minnesota	Wildlife Information Service	Staff answers phone calls with questions about wild life care and identification.	3181	All Ages/Gen Aud.	Outreach
THEME: BIOLOGY (See also NATURAL HISTORY, LIFE SCIENCES)					
Brooklyn Children's Museum Brooklyn, New York	After-School Adventure	Latch-key Ctrs visit museum 4 times based on single theme. Pre-visit workbook introduces theme.	640	Other	Guided Tours
Brooklyn Children's Museum Brooklyn, New York	Balance of Nature	Hands-on examination of live animals and plants.	4800	Elem thru Hi Sch	Classes, Workshops
California Academy of Sciences San Francisco, California	Biology Forum	Scientists' lectures on basic research.	150	Teachers	Lectures, Demos

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Museum of History & Science Louisville, Kentucky	Celebrations	Starlab dome turns into giant one-cell organism, view basic cell structure.	600	Jr Hi thru Hi Sch	Lectures, Demos
Red Mountain Museum Birmingham, Alabama	Dinosaur Program	Audio-visuals, hands-on artifacts and demos, and tour of dinosaur gallery.	6000	Elementary	Classes, Workshops
Insights--El Paso Science Center El Paso, Texas	El Paso Comm. Coll./Insights Summer Science Series	Saturday sessions at museum offer hands-on workshops in the sciences.	40	Elem thru Jr Hi	Classes, Workshops
National Taiwan Science Education Centre Taipei, Taiwan, Rep. of China	Experiment on Biology	Observation of animals and reproduction of animals, plants, and insect specimens.	104	Mdl Sc/Jr Hi	Classes, Workshops
Centre for Educational Museums Bangkok, Thailand	Nervous System	Lectures, demos, and exhibit of preserved human brain.	9	High School	Classes, Workshops
Centre for Educational Museums Bangkok, Thailand	Preserved Food, Plant, Vegetables with Gamma Rays	Works closely with school system to supplement curriculum.	900	High School	Classes, Workshops
Memphis Pink Palace Museum & Planetarium Memphis, Tennessee	Puppets- "Animal Crackers" & "The Dinah Saur Show"	Use of puppets to introduce concept of vertebrates, paleontology.	20000	Elementary	Performing Arts
The Discovery Center Syracuse, New York	Science Workshops	Topics include biology, physical science, and chemistry.	1080	Elementary	Classes, Workshops
Museum of Natural History Lawrence, Kansas	Summer Workshops for Young People	Field trips, week-long classes.	682	Elem thru Jr Hi	Classes, Workshops
Museum of Natural History Lawrence, Kansas	Weekend Workshops	Field trips, activities, hands-on experiences.	822	All Ages/Gen Aud.	Classes, Workshops
Brooklyn Children's Museum Brooklyn, New York	Balance of Nature	Hands-on examination of live animals and plants.	4800	Elem thru Hi Sch	Classes, Workshops

THEME: BIOLOGY/EVOLUTION  
Brooklyn Children's Museum  
Balance of Nature

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SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
THEME: BIOLOGY/ECOLOGY					
The Oakland Museum Oakland, California	Art and Animals	Children tour Natural Science gallery with discovery packs containing touchable objects.	851	Preschoolers	Guided Tours
Bell Museum of Natural History Minneapolis, Minnesota	Avian Architecture	Manipulate bird parts to see how they work.	300	Elem thru Jr Hi	Classes, Workshops
The Oakland Museum Oakland, California	California Water Gardens and Koi Ponds Seminar	One-day seminar on water quality and aquatic systems management for homeowners.	200	Adults-General	Classes, Workshops
Missouri Botanical Garden St. Louis, Missouri	Chautauqua Short Course for Teachers of Science	Accredited workshop on environmental biology and ecology.	30	Teachers	Teacher Training
Bell Museum of Natural History Minneapolis, Minnesota	Children's Hospital Programs	Outreach program.	160	Children	Outreach
Bell Museum of Natural History Minneapolis, Minnesota	Critters a La Cart	Public can touch skins, skulls, etc. Dissection/skinning demos.	5000	All Ages/Gen Aud.	Lectures, Demos
Science Museum of Virginia Richmond, Virginia	Demonstrations	Presentations on sound and motion, air pressure, dinosaurs, and more.	0	All Ages/Gen Aud.	Lectures, Demos
The Oakland Museum Oakland, California	Docent-Led Natural Science Gallery Tours	Tours along representative transect of California ecosystems.	13004	Other	Guided Tours
The Oakland Museum Oakland, California	Docent/Advanced Docent Training Classes	Docents enroll in two-semester ecology course, then semester on exhibits and tour techniques.	120	Other	Classes, Workshops
Vermont Institute of Natural Science Woodstock, Vermont	Ecology Overnights	Hands-on environmental education, social interaction for teachers/students.	150	Elementary	Camp-in
Milwaukee Public Museum Milwaukee, Wisconsin	Egg Hunt	Ask questions about eggs in permanent exhibits during (plastic) egg hunt.	300	Families	Special Events

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SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
Vermont Institute of Natural Science Woodstock, Vermont	ELF (Environmental Learning for the Future)	Teacher training in natural history/environmental education.	5056	Other	Classes, Workshops
Science Museum of Virginia Richmond, Virginia	Field Trips, Expeditions	Canoe trips on streams and rivers to observe wildlife, explore geology.	450	All Ages/Gen Aud.	Field Trips, Studies
Science Center of New Hampshire Holderness, New Hampshire	Floating Classroom - Limnology	Lake study program includes water samplers, hands-on experience on the boat.	500	Jr Hi thru Hi Sch	Field Trips, Studies
The Children's Museum of Utah Salt Lake City, Utah	Food Chain Gang	Participants play part of animals in food chain to learn about ecological concepts.	300	Elem thru Jr Hi	Classes, Workshops
Science Center of New Hampshire Holderness, New Hampshire	Intern Program	Interns teach, build exhibits, give public lectures and demonstrations.	8	College	Internships
Science Center of New Hampshire Holderness, New Hampshire	New Hampshire Mammals	Indoor live animal presentation on what native animals eat and where they live.	800	Elem thru Jr Hi	Lectures, Demos
Science Center of New Hampshire Holderness, New Hampshire	Plant and Animal Communities	Students visit field and forest to examine limiting factors and carrying capacity.	200	Elementary	Field Trips, Studies
Thames Science Center New London, Connecticut	Project Porifera	In-depth summer institute in aquatic biology, support continued through school year.		Teachers	Teacher Training
Vermont Institute of Natural Science Woodstock, Vermont	Residential Teacher Workshops	Two day/night course with lectures, hands-on activities, field trips.	30	Teachers	Classes, Workshops
Virginia Living Museum Newport News, Virginia	Science Safaris	Students join staff biologists for lab/field investigations of ecosystems.	275	High School	Classes, Workshops
Catawba Science Center Lickory, North Carolina	Spotlight on Science	Co-sponsored with local university to highlight science issues and trends.	320	All Ages/Gen Aud.	Lectures, Demos

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SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
Georgia Southern Museum Statesboro, Georgia	Summer Adventure Camp	Day camp centered on exhibits at museum includes several field trips.	75	High Schoo!	Classes, Workshops
Virginia Living Museum Newport News, Virginia	Summer Field Schools	Five-day science expeditions to habitats, students set up base camp.	50	Mdl Sc/Jr Hi	Field Trips, Studies
The Oakland Museum Oakland, California	Summer Science Camp	Week-long resident camp includes hands-on explorations in forest, tidepools.	32	Elem thru Jr Hi	Classes, Workshops
Museum of Natural History Lawrence, Kansas	Teacher Workshops	In-service credit for learning new approaches to teaching science.	231	Teachers	Teacher Training
Science Center of New Hampshire Holderness, New Hampshire	The World of Life: the Biosphere	Ecology course for graduate students offered in conjunction with local college.	20	Grad Sdnts	Classes, Workshops
Vermont Institute of Natural Science Woodstock, Vermont	Touring Natural History Programs	Outreach presentations, some using live animals.	14389	All Ages/Gen Aud.	Outreach
Sacramento Science Center & Junior Museum Sacramento, California	Tours	Sixty to ninety minute tours encourage inquiry, sharing.	12000	Elem thru Hi Sch	Guided Tours
The Children's Museum of Houston Houston, Texas	Weeklong Science Camp	Weeklong science camp focuses on science process skills.	60	Elem thru Jr Hi	Classes, Workshops
Bell Museum of Natural History Minneapolis, Minnesota	Wildlife Information Service	Staff answers phone calls with questions about wild life care and identification.	3181	All Ages/Gen Aud.	Outreach
Chicago Botanic Garden Glencoe, Illinois	Chicago Core Program	Curriculum enrichment program on plant science.	0	Elementary	Classes, Workshops

THEME: BIOLOGY/BOTANY

Chicago Botanic Garden  
Glencoe, Illinois

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SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
Schiele Museum of Natural History Gastonia, North Carolina	Earthmagic - Week of the Young Earthling	Characters represent water, animals, plants, and explain their importance.	2200	Elementary	Performing Arts
Science Museum of Virginia Richmond, Virginia	Field Trips, Expeditions	Canoe trips on streams and rivers to observe wildlife, explore geology.	450	All Ages/Gen Aud.	Field Trips, Studies
Chicago Botanic Garden Glencoe, Illinois	Graduate Teacher Educ Courses	Collaborative program with National College of Educators.	25	Teachers	Teacher Training
Brooklyn Children's Museum Brooklyn, New York	Greenhouse Family Programs	Families dissect, plant, and make peanut products.	8000	Families	Classes, Workshops
Chicago Botanic Garden Glencoe, Illinois	Heritage Garden Interpretation	Actor portrays Carl Linnaeus, takes visitors on garden tour.	5595	All Ages/Gen Aud.	Performing Arts
Brooklyn Children's Museum Brooklyn, New York	Joining Julian	Celebrates Black research chemist during Black History Month.	360	Families	Special Events
Chicago Botanic Garden Glencoe, Illinois	Student Internships	Students work in various depts. of Garden, lead public tours.	10907	College	Internships
Sacramento Science Center & Junior Museum Sacramento, California	Tours	Sixty to ninety-minute tours encourage inquiry, sharing.	12000	Elem thru Hi Sch	Guided Tours
THEME: BIOLOGY/ZOOLOGY					
Brooklyn Children's Museum Brooklyn, New York	After-School Adventure	Latch-Key Ctrs visit museum 4 times based on single theme. Pre-visit workbook introduces theme.	640	Other	Guided Tours
The Oakland Museum Oakland, California	Art and Animals	Children tour Natural Science gallery with discovery packs containing touchable objects.	851	Preschoolers	Guided Tours
Carter House Science Museum Redding, California	Bigfoot/Littlefoot	Animal demonstrations and art activities.	30	Elem thru Hi Sch	Classes, Workshops

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Reported in Science-Center Data Survey**

SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
California Academy of Sciences San Francisco, California	Biology Forum	Scientists' lectures on basic research.	150	Teachers	Lectures, Demos
Milwaukee Public Museum Milwaukee, Wisconsin	Egg Hunt	Ask questions about eggs in permanent exhibits during (plastic) egg hunt.	300	Families	Special Events
Virginia Living Museum Newport News, Virginia	Field Zoology	Two-week accredited teacher-training course, lab and field experience.	21	Teachers	Teacher Training
The Science Museum of Minnesota St. Paul, Minnesota	Inventors' Fair	Creative problem-solving, 5-7 students'invention selected for display.	107	Elem thru Jr Hi	Special Events
Springfield Science Museum Springfield, Massachusetts	Reptiles	Investigation of reptile behavior and characteristics, live snakes and turtles.	3500	Elementary	Classes, Workshops
The Oakland Museum Oakland, California	Summer Science Camp	Week-long resident camp includes hands-on explorations in forest, tidepools.	32	Elem thru Jr Hi	Classes, Workshops
Carter House Science Museum Redding, California	Zoomobile	Docents bring animals and hands-on materials to schools.	3000	Elem thru Jr Hi	Classes, Workshops
National Museum of Natural Science Taichung, Taiwan, Republic of China	THEME: Live Animals Field Trip - Bird Watching	Visit birds' habitats, learn characteristics and behavior.	240	All Ages/Gen Aud.	Field Trips, Studies
Indiana State Museum Indianapolis, Indiana	Fowl Play	Progressive field study of three orders of birds held at local institutions.	900	Elementary	Field Trips, Studies
Red Mountain Museum Birmingham, Alabama	THEME: SOCIAL SCIENCES/ANTHROPOLOGY Annual Alabama Indian Festival	Two-day festival with demos and activities performed by Native Americans, lectures.	1500	Families	Special Events

**EDUCATIONAL PROGRAMS**  
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SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
Museum of Applied Arts and Sciences Sydney, New South Wales, Australia	Boomerang Throwing Workshop	Member of aboriginal community teaches children to throw boomerang.	0	Elem thru Jr Hi	Classes, Workshops
Anniston Museum of Natural History Anniston, Alabama	Discovery Days	Focus on natural history appreciation.	75	Elem thru Jr Hi	Classes, Workshops
St. Louis Science Center St. Louis, Missouri	Discovery Room	Hands-on experience with exhibits and artifacts.	58733	Elementary	Classes, Workshops
Idaho Museum of Natural History Pocatello, Idaho	Ethnographic Outreach	Introduces children to culture of Native American peoples.	600	Elementary	Classes, Workshops
Insights-El Paso Science Center El Paso, Texas	Explore New Horizons	Teachers compete to teach 3-week summer courses at local university.	24	Mdl Sc/Jr Hi	Classes, Workshops
California Academy of Sciences San Francisco, California	Junior Academy	Classes/field trips on natural science.	2200	Elem thru Hi Sch	Field Trips, Studies
Idaho Museum of Natural History Pocatello, Idaho	Junior Science Academy	Week-long program on various scientific subjects.	115	Elementary	Classes, Workshops
Cranbrook Institute of Science Bloomfield Hills, Michigan	Kindergarten Program	Four sessions, each one hour long, highlight birds, mammals, Indians, Discovery Room.	1100	Elementary	Classes, Workshops
Discovery Museum Essex Junction, Vermont	Loan Kits-Curriculum Aids	Loan kits range from dinosaur kits to bicycles.	6000	Preschool-Gr. 12	Outreach
Kalamazoo Public Museum Kalamazoo, Michigan	Preschoolers at the Museum	Explore museum and make-and-take-it craft.	1100	Preschoolers	Classes, Workshops
Indiana State Museum Indianapolis, Indiana	Reach Bus	Outreach unit includes 10 exhibits, educ. coordinator, artist in residence.	9000	Elem thru Hi Sch	Outreach
South Florida Science Museum West Palm Beach, Florida	Senior Citizen's Science Seminars	Monthly lectures, usually pertaining to museum's current exhibit.	500	Senior Citizens	Lectures, Demos

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SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
Idaho Museum of Natural History Pocatello, Idaho	Senior High School Science Careers	Science clubs from high schools visit university and museum to discuss careers in science.	3	High School	Career Workshops
The Science Place Dallas, Texas	THEME: Human Evolution China School Tours	School tours of China exhibition includes interaction with artisans.	52000	Elc Sch	Guided Tours
Idaho Museum of Natural History Pocatello, Idaho	Ethnographic Outreach	Introduces children to culture of Native American peoples.	600	Elementary	Classes, Workshops
Museum of the Rockies Bozeman, Montana	Stone Procurement and Use by Stone-age Montanans	Research findings on mining techniques and tool dating.	80	All Ages/Gen Aud.	Lectures, Demos
The Children's Museum Boston, Massachusetts	Teacher Seminars	Daylong seminars on the museum's specialties.	253	Teachers	Teacher Training
Milwaukee Public Museum Milwaukee, Wisconsin	THEME: Archaeology Archaeological Rescue	Participate in all phases of archeology, including analysis/lab work.	200	Other	Field Trips, Studies
Alfred P. Sloan Jr. Museum Flint, Michigan	General Museum Tours	Overview of the museum's exhibition areas.	30000	Elcm thru Hi Sch	Guided Tours
California Academy of Sciences San Francisco, California	Junior Academy	Classes/field trips on natural science.	2200	Elcm thru Hi Sch	Field Trips, Studies
The Kansas City Museum Kansas City, Missouri	Mission Discovery	Students work in pairs of two to answer questions about specific artifacts.	500	Elementary	Classes, Workshops
Schiele Museum of Natural History Gastonia, North Carolina	Pioneer Lifestyle Experience	Lore and living style of 18th-century Carolina Backcountry settlers presented.	7500	All Ages/Gen Aud.	Performing Arts
The Kansas City Museum Kansas City, Missouri	Please Touch	Students can handle artifacts and repro. pieces in four exhibit areas.	1300	Elementary	Guided Tours

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SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
Kalamazoo Public Museum Kalamazoo, Michigan	Preschoolers at the Museum	Explore museum and make-and-take-it craft.	1100	Preschoolers	Classes, Workshops
The Space Center Alamogordo, New Mexico	Teacher Newsletter	Monthly newsletter to teachers provides resource materials, promotes museum programs.	100	Teachers	Outreach
Exploratorium San Francisco, California	Exploratorium Teacher Institute	Intensive summer and after-school workshops using the exhibit-based curriculum.  THEME: SOCIAL SCIENCES/PSYCHOLOGY (See also PHYSICS/OPTICS)	300	Teachers	Classes, Workshops
Science Museum of Connecticut West Hartford, Connecticut	Across the Lines	Telecommunications on all topics between two racially segregated schools.  THEME: SOCIAL SCIENCES/HISTORY, MISCELLANEOUS	100	Children	Classes, Workshops
Red Mountain Museum Birmingham, Alabama	Annual Alabama Indian Festival	Two-day festival with demos and activities performed by Native Americans, lectures.	1500	Families	Special Events
Museum of Applied Arts and Sciences Sydney, New South Wales, Australia	Australian	Ethnic groups trace contributions of their culture to Australian history.	0	All Ages/Gen Aud.	Classes, Workshops
McAllen International Museum McAllen, Texas	Charles Franteras Film/Discussion Series	Mexican border culture studies, discussions led by sociology professors.	815	All Ages/Gen Aud.	Films, Shows
Brooklyn Children's Museum Brooklyn, New York	Collection Connection	Use of library resources, observation skills, photos to answer questions.	2560	Families	Classes, Workshops
Indiana State Museum Indianapolis, Indiana	Covered Wagon	Brings miniature covered wagon to classroom for study of contents, pioneer lifestyle.	6000	Elementary	Outreach

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**EDUCATIONAL PROGRAMS**  
**Reported in Science-Center Data Survey**

SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
The Children's Museum Indianapolis, Indiana	Cultural Focus Days	Artifacts, traditions, customs, foods, celebrate a country or region.	5000	All Ages/Gen Aud.	Special Events
National Museum of American History Washington, DC	Discovery Room	Dress in period costumes, assemble chairs, etc., under guidance.	0	Children	Lectures, Demos
Indiana State Museum Indianapolis, Indiana	Gaslight	Study of Indianapolis culture 100 years ago, includes trip to restored 1970s home.	200	Elem thru Jr Hi	Classes, Workshops
Science Museum of Virginia Richmond, Virginia	Joy from the World	Six-week event celebrates winter solstice.	22000	All Ages/Gen Aud.	Special Events
The Kansas City Museum Kansas City, Missouri	Mission Discovery	Students work in pairs of two to answer questions about specific artifacts.	500	Elementary	Classes, Workshops
The Kansas City Museum Kansas City, Missouri	Please Touch	Students can handle artifacts and repro. pieces in four exhibit areas.	1300	Elementary	Guided Tours
THEME: MEDICINE AND HEALTH					
Discovery Hall Austin, Texas	After-School Science	Make friends, learn about science after school.	563	Elementary	Classes, Workshops
Discovery Hall Austin, Texas	Discovery Camp	Week-long sessions on various topics.	633	Elementary	Classes, Workshops
Kansas Health Museum Halstead, Kansas	Human Growth & Development	Gives teachers vocabulary and background to feel comfortable teaching the topic.	75	Teachers	Teacher Training
Kansas Health Museum Halstead, Kansas	Human Growth & Development	Reproduction, birth, and factors affecting them.	4000	Elem thru Jr Hi	Classes, Workshops
Discovery Hall Austin, Texas	Mentor Program	Students work in small groups to learn about exhibits, do experiments, etc.	30	Elementary	Classes, Workshops

**EDUCATIONAL PROGRAMS**  
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SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
Jacksonville Museum of Arts & Science Jacksonville, Florida	Outreach '87	Outreach method uses inquiry method and hands-on techniques to teach good health.	16600	Elem thru Jr Hi	Outreach
Discovery Hall Austin, Texas	Special Interest Groups	Members come on Saturday to work on science projects.	20	Other	Science Clubs
Discovery Hall Austin, Texas	Teacher Workshops	Hands-on machines, electricity, magnetism, science fair.	300	Teachers	Teacher Training
Kansas Health Museum Halstead, Kansas	Wellness	A course for school personnel on the positive side of health.	1500	Other	Classes, Workshops
The Health Adventure Asheville, North Carolina	THEME: Fitness, Personal Health Dental	Brushing, flossing, and how to prevent gum disease.	4244	Elementary	Classes, Workshops
Cumberland Museum and Science Center Nashville, Tennessee	Growth and Development	Audiovisuals, activities based on exhibits related to Family Life curriculum.	875	All Ages/Gen Aud.	Classes, Workshops
Cumberland Museum and Science Center Nashville, Tennessee	Health Hall	Volunteer teacher guides class in use of hands-on activities on 4 topics.	3800	Elem thru Jr Hi	Classes, Workshops
The Health Adventure Asheville, North Carolina	Life Patterns	Discussion of physical and emotional changes in adolescence.	3086	All Ages/Gen Aud.	Classes, Workshops
Jacksonville Museum of Arts & Science Jacksonville, Florida	Outreach '87	Outreach method uses inquiry method and hands-on techniques to teach good health.	16600	Elem thru Jr Hi	Outreach
Kansas Health Museum Halstead, Kansas	Survey of Body Systems	Uses museum exhibits to illustrate and supplement classes.	2500	Elem thru Jr Hi	Classes, Workshops
Denver Museum of Natural History Denver, Colorado	Teen Sexuality	Discusses attitudes toward sex, venereal diseases, birth control.	3172	Jr Hi thru Hi Sch	Classes, Workshops
Kansas Health Museum Halstead, Kansas	Wellness	A course for school personnel on the positive side of health.	1500	Other	Classes, Workshops

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SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
The Health Adventure Asheville, North Carolina	THEME: Nutrition Nutrition	Explains the four food groups and how to eat healthfully.	3794	All Ages/Gen Aud.	Classes, Workshops
Denver Museum of Natural History Denver, Colorado	Outreach Programs	Outreach to schools throughout state.	19977	Preschool-Gr. 12	Outreach
Denver Museum of Natural History Denver, Colorado	Summer Workshops	Two-hour workshops with activities and snacks.	451	Elem thru Jr Hi	Classes, Workshops
The Health Adventure Asheville, North Carolina	THEME: Dental Health Dental	Brushing, flossing, and how to prevent gum disease.	4244	Elementary	Classes, Workshops
The Discovery Museums Acton, Massachusetts	THEME: MEDICINE/SYSTEMS OF THE BODY Body Music	Hands-on outreach program that focuses on body sounds--burps, sneezes, hiccups, coughs, and snores.	300	Preschoolers	Outreach
The Health Adventure Asheville, North Carolina	Bones	Describes functions of skeletal system, how to keep bones healthy.	4703	All Ages/Gen Aud.	Classes, Workshops
Alfred P. Sloan Jr. Museum Flint, Michigan	Family Life/human Reproduction	Designed for mother/daughter, father/son combos. Stresses family unity.	500	Families	Classes, Workshops
Alfred P. Sloan Jr. Museum Flint, Michigan	General Health Tour	Tour of the permanent health exhibits at the museum.	4000	Elem thru Hi Sch	Guided Tours
Alfred P. Sloan Jr. Museum Flint, Michigan	General Museum Tours	Overview of the museum's exhibition areas.	30000	Elem thru Hi Sch	Guided Tours
Denver Museum of Natural History Denver, Colorado	Gifted & Talented Workshops	Hands-on learning labs for highly motivated children and parents.	200	Elem thru Jr Hi	Classes, Workshops

**EDUCATIONAL PROGRAMS**  
**Reported in Science-Center Data Survey**

SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
National Museum of Natural Science Taichung, Taiwan, Republic of China	Health Activities Project	Students learn how their bodies function.	800	Elem thru Jr Hi	Classes, Workshops
Kansas Health Museum Halstead, Kansas	Human Growth & Development	Reproduction, birth, and factors affecting them.	4000	Elem thru Jr Hi	Classes, Workshops
Kansas Health Museum Halstead, Kansas	Human Growth & Development	Gives teachers vocabulary and background to feel comfortable teaching the topic.	75	Teachers	Teacher Training
Brooklyn Children's Museum Brooklyn, New York	Joining Julian	Celebrates Black research chemist during Black History Month.	360	Families	Special Events
Idaho Museum of Natural History Pocatello, Idaho	Junior Science Academy	Week-long program on various scientific subjects.	115	Elementary	Classes, Workshops
The Health Adventure Asheville, North Carolina	Life Patterns	Discussion of physical and emotional changes in adolescence.	3086	All Ages/Gen Aud.	Classes, Workshops
Centre for Educational Museums Bangkok, Thailand	Nervous System	Lectures, demos, and exhibit of preserved human brain.	9	High School	Classes, Workshops
Orlando Science Center Orlando, Florida	Organs of the Human Body	Hands-on lecture illustrated with real human organs.	8932	Elementary	Lectures, Demos
Denver Museum of Natural History Denver, Colorado	Outreach Programs	Outreach to schools throughout state.	19977	Preschool-Gr. 12	Outreach
The Health Adventure Asheville, North Carolina	Senses	Light show, giant models of five senses, stimulating activities.	4758	All Ages/Gen Aud.	Guided Tours
Denver Museum of Natural History Denver, Colorado	Summer Workshops	Two-hour workshops with activities and snacks.	451	Elem thru Jr Hi	Classes, Workshops
Kansas Health Museum Halstead, Kansas	Survey of Body Systems	Uses museum exhibits to illustrate and supplement classes.	2500	Elem thru Jr Hi	Classes, Workshops

**EDUCATIONAL PROGRAMS**  
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SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
Denver Museum of Natural History Denver, Colorado	THEME: Heart, Cardiovascular System Gifted & Talented Workshops	Hands-on learning labs for highly motivated children and parents.	200	Elem thru Jr Hi	Classes, Workshops
Denver Museum of Natural History Denver, Colorado	Healthy Heart	Hands-on activities show how heart works, how to have healthy lifestyle.	4150	All Ages/Gen Aud.	Classes, Workshops
Milwaukee Public Muscum Milwaukee, Wisconsin	THEME: FOOD, AGRICULTURE, FORESTRY Arbor Day Intergenerational Program	Young and old exchange letters, meet, plant a tree.	50	Other	Special Events
The Oakland Museum Oakland, California	California Water Gardens and Koi Ponds Seminar	One-day seminar on water quality and aquatic systems management for homeowners.	200	Adults-General	Classes, Workshops
Missouri Botanical Garden St. Louis, Missouri	Horticultural Answer Service	Volunteers are trained to answer gardening questions over the telephone.	20000	Other	Outreach
Missouri Botanical Garden St. Louis, Missouri	Master Gardeners	Volunteers are trained to conduct educational programs and provide assistance.	5000	Other	Classes, Workshops
Nagoya Municipal Science Museum Nagoya, Japan	THEME: TECHNOLOGY Demonstration on the Exhibition Floors	TV studio, scanning electron microscope and radar, and other demos.	2000	All Ages/Gen Aud.	Lectures, Demos
Science Museum of Connecticut West Hartford, Connecticut	THEME: TECHNOLOGY/CIVIL ENGINEERING, ARCHITECTURE CPEP (Connecticut Pre-engineering Program)	Support network and programs to keep students in math and science.	65	Mdl Sc/Jr Hi	Career Workshops
Centre for Educational Museums Bangkok, Thailand	THEME: TECHNOLOGY/ENERGY, POWER PRODUCTION (See also PHYSICS/ELECTRICITY Petroleum	Students learn about energy conservation.	7	High School	Classes, Workshops

**EDUCATIONAL PROGRAMS**  
**Reported in Science-Center Data Survey**

SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
Singapore Science Centre Singapore, Republic of Singapore	Technology Fair	A display of students' projects based on what they've learned in labs and lectures.	15000	College	Special Events
Museum of Applied Arts and Sciences Sydney, New South Wales, Australia	Fairlight CVI Workshop	Students use their own video footage in a workshop on video production.	0	Elem thru Hi Sch	Classes, Workshop;
Schiele Museum of Natural History Gastonia, North Carolina	Pioneer Lifestyle Experience	Lore and living style of 18th-century Carolina Backcountry settlers presented.	7500	All Ages/Gen Aud.	Performing Arts
Louisiana Science Centre & IMAX Theatre New Orleans, Louisiana	Computer Classes	Computer awareness classes, including robotics, for college credit.	1000	All Ages/Gen Aud.	Classes, Workshops
Museum of Applied Arts and Sciences Sydney, New South Wales, Australia	Fairlight CVI Workshop	Students use their own video footage in a workshop on video production.	0	Elem thru Hi Sch	Classes, Workshops
The Franklin Institute Science Museum Philadelphia, Pennsylvania	Headstart Program - "Keyboards for Kids"	Computer literacy classes for the underprivileged.	1920	Low Income	Classes, Workshops
Kalamazoo Public Museum Kalamazoo, Michigan	Walking Tours	Tours through city highlight local history and architecture.	150	All Ages/Gen Aud.	Tours, Travel Prog
Science Museum of Connecticut West Hartford, Connecticut	Across the Lines	Telecommunications on all topics between two racially segregated schools.	100	Children	Classes, Workshops
Science Museum of Connecticut St. Hartford, Connecticut	CPEP (Connecticut Pre-engineering Program)	Support network and programs to keep students in math and science.	65	Mdl Sc/Jr Hi	Career Workshops

**EDUCATIONAL PROGRAMS**  
**Reported in Science-Center Data Survey**

SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
California Museum of Science & Industry Los Angeles, California	Computer Artist Demonstrations	Artists learn about computers in exchange for doing artwork for visitors.	15000	All Ages/Gen Aud.	Lectures, Demos
Museo Tecnologico De C.F.E. Mexico City, D.F., Mexico	Computer Workshop	LOGO program focuses on logic and reasoning.	720	Elem thru Jr Hi	Classes, Workshops
Centre for Educational Museums Bangkok, Thailand	Computer for Education	Work with school districts to provide computer training for secondary students.	3	High School	Classes, Workshops
Museum of Science and Industry Chicago, Illinois	Computers and You	One-hour hands-on introduction to computers plus tour of related exhibits.	3000	Elementary	Classes, Workshops
Science World Vancouver, British Columbia, Canada	Computers for Little People	Introduction to LOGO.	500	Preschoolers	Classes, Workshops
Museo Tecnologico De C.F.E. Mexico City, D.F., Mexico	Digital Logic	Children learn computer logic basics by building circuits.	240	Elem thru Jr Hi	Classes, Workshops
The Technology Center of Silicon Valley San Jose, California	Project Mindstorm	Learn how to program computers and become comfortable with technology.	31	Elementary	Classes, Workshops
Museo Tecnologico De C.F.E. Mexico City, D.F., Mexico	Robotics	Children learn basics of robotics, build prototypes.	250	Elem thru Jr Hi	Classes, Workshops
Singapore Science Centre Singapore, Republic of Singapore	Technology Fair	A display of students' projects based on what they've learned in labs and lectures.	15000	College	Special Events
Deutsches Museum Munich, West Germany	Textile Technology	Students can use spinning wheels, tools, etc., in textile technology department.	600	Mdl Sc/Jr Hi	Classes, Workshops

THEME: TECHNOLOGY/LASERS (See also Holograms)

Deutsches Museum  
Munich, West Germany

**EDUCATIONAL PROGRAMS**  
**Reported in Science-Center Data Survey**

SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
<b>THEME: EDUCATION</b>					
Lakeview Museum of the Arts & Sciences Peoria, Illinois	A Parental Involvement Program in Elementary Astronomy	Students and parents attend planetarium lessons together, coincides with curriculum.	220	Families	Classes, Workshops
Science Discovery Center of Tompkins Co. Ithaca, New York	After School Program	Hands-on activities, plus program provides after-school care.	0	Elementary	Classes, Workshops
Milwaukee Public Museum Milwaukee, Wisconsin	Arbor Day Intergenerational Program	Young and old exchange letters, meet, plant a tree.	50	Other	Special Events
Milwaukee Public Museum Milwaukee, Wisconsin	Archaeological Rescue	Participate in all phases of archeology, including analysis/lab work.	200	Other	Field Trips, Studies
Deutsches Museum Munich, West Germany	Building Blocks	Students play with building kits, exhibit what they've made.	1200	Preschool-Gr. 12	Classes, Workshops
Science Museums of Charlotte Charlotte, North Carolina	By Gosh It Works!	Hands-on science methodology for teachers.	125	Teachers	Teacher Training
Museum of the Rockies Bozeman, Montana	Children's Science Book and Equipment Fair	Enrichment materials, including kits, computers, and software.	600	Other	Special Events
The Children's Museum Boston, Massachusetts	Designing Playful Educational Experiences	Semester science course for teachers that is credited through Lesley College.	8	Teachers	Teacher Training
Virginia Living Museum Newport News, Virginia	Early Birds	Nine-month nature education course.	72	Preschoolers	Classes, Workshops
Museum of Science Boston, Massachusetts	Elementary Science Outreach Programs	Science kits available for rental.	800	Teachers	Outreach
New York Hall of Science Corona, New York	Explainer	College students conduct workshops, deliver workshops, do hands-on demos.	50	College	Explainers
Milwaukee Public Museum Milwaukee, Wisconsin	Girl Scout Overnight/Collector's Corner	Flashlight tour of museum, cook breakfast in pioneer house.	26	Other	Camp-in

**EDUCATIONAL PROGRAMS**  
**Reported in Science-Center Data Survey**

SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
Science Center of Iowa Des Moines, Iowa	In-center Demonstration Program	Area specialists develop and present demos on various science topics.	57941	All Ages/Gen Aud.	Lectures, Demos
Virginia Living Museum Newport News, Virginia	In-school Programs	Outreach program offers nature education presentations.	25000	Elementary	Outreach
Omniplex Science Museum Oklahoma City, Oklahoma	Inservice Workshops	Teachers learn hands-on techniques, emphasis on low cost materials.	631	Teachers	Teacher Training
Ontario Science Centre Don Mills, Ontario, Canada	Intermediate Science for Teachers	One-month, university-accredited course on science teaching techniques.	28	Teachers	Teacher Training
Science Center of Iowa Des Moines, Iowa	King/Perkins Science Magnet School Project	Museum facility and equipment used to enhance magnet school science programs.	590	Elementary	Classes, Workshops
Science Center of Iowa Des Moines, Iowa	Outreach Demonstration Program	Outreach demos travel throughout state.	8068	Elem thru Hi Sch	Outreach
The Children's Museum Indianapolis, Indiana	Preschool Teacher Workshops	Teachers learn of available museum resources and select topic for classroom work.	300	Teachers	Teacher Training
Museum of Science Boston, Massachusetts	Public Demos, Interpretations & Discovery Spaces	Interpretation of traveling exhibits and discovery spaces.	1000000	All Ages/Gen Aud.	Lectures, Demos
Museum of Science Boston, Massachusetts	School Visits Program	Forty-five minute classroom or theater program.	232000	Elem thru Hi Sch	Classes, Workshops
Science Center of Iowa Des Moines, Iowa	Science Center Preschool	Provides preschool instruction and care in addition to science enrichment.	72	Preschoolers	Classes, Workshops
Science Discovery Center of Tompkins Co. Ithaca, New York	Science and Art for Preschool	Arts and crafts activities at day-care home or center, materials provided.	125	Preschoolers	Classes, Workshops

**EDUCATIONAL PROGRAMS**  
**Reported in Science-Center Data Survey**

SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
Museum of Art, Science & Industry Bridgeport, Connecticut	Special Needs Adapted Photography	Incorporate polaroid photography into programs for special audiences.	0	Disabled	Classes, Workshops
Sacramento Science Center & Junior Museum Sacramento, California	STEAM Internship	Teachers work alongside science center staff, develop resource kits.	6	Teachers	Internships
The Discovery Museums Acton, Massachusetts	Summer Discoveries	Two-week session of 2-hour workshops on arts, humanities, and the sciences.	40	Elementary	Classes, Workshops
The Discovery Museums Acton, Massachusetts	Teacher Workshops	A pilot program offering curriculum suggestions through exploration of materials.	25	Teachers	Teacher Training
The Children's Museum Indianapolis, Indiana	University Student Practicums	University student teachers work with students in museum environment.	15	Teachers	Internships
Jacksonville Museum of Arts & Science Jacksonville, Florida	Youth Internships	Students apply and are trained for specific jobs at museum.	60	Jr Hi thru Hi Sch	Internships
<b>THEME: SCIENTIFIC METHOD AND PROCESS</b>					
Museum of History & Science Louisville, Kentucky	Aha Classes	Enrichment programs on topics such as Inchworms, Gadgets.	321	Kindergarten	Classes, Workshops
Buhl Science Center Pittsburgh, Pennsylvania	Buhl Invention Convention	Students describe and demonstrate their invention.	120	Elem thru Hi Sch	Special Events
Ohio's Center of Science and Industry Columbus, Ohio	COSI Camp-in	Special workshops plus chance to browse exhibits, see demonstrations.	32000	Females	Camp-in
Museum of Science Boston, Massachusetts	Camp-ins	Theater programs, workshops, demonstrations.	21200	Elem thru Jr Hi	Camp-in
Brooklyn Children's Museum Brooklyn, New York	Collection Connection	Use of library resources, observation skills, photos to answer questions.	2560	Families	Classes, Workshops

**EDUCATIONAL PROGRAMS**  
**Reported in Science-Center Data Survey**

SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
Catawba Science Center Hickory, North Carolina	Educational Outreach	Outreach hands-on science programs to enhance school curriculum.	12246	Elem thru Hi Sch	Outreach
New York Hall of Science Corona, New York	Explainer	College students conduct workshops, deliver workshops, do hands-on demos.	50	College	Explainers
National Museum of Natural Science Taichung, Taiwan, Republic of China	Hands-on Science	Emphasis on observation, experiments, and predicting and retesting.	920	Elementary	Classes, Workshops
Fernbank Science Center Atlanta, Georgia	Independent Study/Student Research	Students pursue independent research under staff direction.	50	High School	Internships
The Children's Museum Indianapolis, Indiana	Museum Overnites	Develop critical thinking skills, explore museum.	75	Elementary	Camp-in
Insights--El Paso Science Center El Paso, Texas	Nuts 'n' Bolts of Science Fair Projects	How to choose, design, build, and display a science fair project.	37	Elem thru Jr Hi	Classes, Workshops
Alberta Science Centre/Centennial Planetarium Calgary, Alberta, Canada	Planetarium School Show Evaluation and Revision	Teacher committees modify planetarium program to serve curriculum.	20000	Teachers	Planetarium
Museum of Science Boston, Massachusetts	Saturday Education Courses Program	Science classes and mini-courses.	785	Elem thru Jr Hi	Classes, Workshops
Science Station Cedar Rapids, Iowa	Science Fair Mentor Program	Scientists from community are matched with students to participate in fair.	10	Jr Hi thru Hi Sch	Special Events
Impression 5 Science Museum Lansing, Michigan	Science Initiatives '87	Conduct experiments using museum exhibits.	2000	Elementary	Classes, Workshops
Catawba Science Center Hickory, North Carolina	Science Teacher Workshops	Certificate renewal credit with regional university.	76	Teachers	Teacher Training
Fernbank Science Center Atlanta, Georgia	Scientific Tools and Techniques	Students spend quarter of the year in scientific study at the museum.	180	High School	Classes, Workshops

**EDUCATIONAL PROGRAMS**  
**Reported in Science-Center Data Survey**

SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
Sacramento Science Center & Junior Museum Sacramento, California	SMART (Scientific Methods and Resources Training)	Two curriculum series consisting of 4 manuals each, hands-on activities.	200	Teachers	Teacher Training
Ohio's Center of Science and Industry Columbus, Ohio	Young Experimental Scientist (YES)	Daylong workshop/enrichment program at the museum.	3500	Other	Classes, Workshops
<b>THEME: CAREERS IN SCIENCE</b>					
Lawrence Hall of Science Berkeley, California	Equals, Equals in Computer Technology, Family Math	EQUALS promotes participation of females and minorities in math and computer education.	7975	Minorities	Classes, Workshops
Bell Museum of Natural History Minneapolis, Minnesota	Get Wise	Meet women scientists to explore career opportunities.	40	High School	Career Workshops
Red Mountain Museum Birmingham, Alabama	Science Career Day	Science field professionals demonstrate and talk about their careers.	100	Elem thru Hi Sch	Career Workshops
Science Station Cedar Rapids, Iowa	Science Fair Mentor Program	Scientists from community are matched with students to participate in fair.	10	Jr Hi thru Hi Sch	Special Events
Idaho Museum of Natural History Pocatello, Idaho	Senior High School Science Careers	Science clubs from high schools visit university and museum to discuss careers in science.	3	High School	Career Workshops
New Jersey State Museum Trenton, New Jersey	South Dakota Field Experience	College credit for field experience on paleontological techniques.	0	College	Field Trips, Studies
Jacksonville Museum of Arts & Science Jacksonville, Florida	Youth Internships	Students apply and are trained for specific jobs at museum.	60	Jr Hi thru Hi Sch	Classes, Workshops
<b>THEME: OTHER</b>					
California Academy of Sciences Francisco, California	"Ask Me" Team	Students are paid to answer public's questions.	10	High School	Explainers

**EDUCATIONAL PROGRAMS**  
**Reported in Science-Center Data Survey**

SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
Lakeview Museum of the Arts & Sciences Peoria, Illinois	Art & Science Classes	Variety of topics offered 3 times a week, usually for 8 weeks.	900	All Ages/Gen Aud.	Classes, Workshops
The Science Museum of Minnesota St. Paul, Minnesota	Arts and Science and/or Cultural Camps	Interdisciplinary camps integrating culture, humanities, science, drama, language arts.	500	Preschool-Gr. 12	Classes, Workshops
New England Science Center Worcester, Massachusetts	Birthday Party	Museum tour, animal program, tour of outside zoo.	90	Preschool-Gr. 12	Guided Tours
California Museum of Science & Industry Los Angeles, California	California State Science Fair	Winners of local county science fairs compete at the state level.	875	Teachers	Special Events
Detroit Science Center Detroit, Michigan	Careers in Science for Women	Women scientists make presentations to motivate others to pursue science careers.	200	Females	Career Workshops
Kansas Health Museum Halstead, Kansas	Child Sexual Abuse	A training model for school personnel.	150	Other	Classes, Workshops
Detroit Science Center Detroit, Michigan	Demonstration Theatre	Twenty-minute demonstrations are given hourly on light, electricity, liquid air.	100000	All Ages/Gen Aud.	Lectures, Demos
St. Louis Science Center St. Louis, Missouri	Encouraging Energy Education Mini-grant Program	Teachers can apply for money to purchase equipment on energy-related curriculum projects.	18	Teachers	Outreach
Museum of Science and Industry Chicago, Illinois	Explorations	Hands-on activities pertaining to mixture of sciences, technology, medicine.	5500	Preschool-Gr. 12	Classes, Workshops
The Children's Museum of Utah Salt Lake City, Utah	Extra, Extra: Write All about It	Course on journalism teaches editing, layout, interviewing, reporting.	12	Elem thru Jr Hi	Classes, Workshops
Discovery Museum Essex Junction, Vermont	Family Programs	A new program of lectures and demonstrations.	200	Families	Lectures, Demos

**EDUCATIONAL PROGRAMS**  
**Reported in Science-Center Data Survey**

SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
St. Louis Science Center St. Louis, Missouri	Festival of Flight	NASA teacher workshops, kite making, rocketry demos, bubblemaking, hot air balloon, etc.	2055	All Ages/Gen Aud.	Special Events
The Children's Museum Indianapolis, Indiana	Gifted/Talented Programming	Students work on project at museum.	800	Elem thru Jr Hi	Classes, Workshops
North Carolina Museum of Life & Science Durham, North Carolina	Girl Scout Camp-in	Girl Scouts participate in workshops and group activities, sleepover at museum.	1200	Females	Camp-in
Discovery Museum Essex Junction, Vermont	Group Visits	Schools tour the museum as a class.	16000	Preschool-Gr. 12	Guided Tours
Capital Children's Museum Washington, DC	Hasbro Project	Sign language instruction for staff, exhibits & facilities accessible to deaf population, promote public awareness of deaf culture.	0	Disabled	Classes, Workshops
The Science Museum of Minnesota St. Paul, Minnesota	Informal Program/Activities on Exhibit Floors	Short educational presentations that enhance the visitors' experience.	0	All Ages/Gen Aud.	Lectures, Demos
Capital Children's Museum Washington, DC	MET-Kids	After-school program of enrichment activities.	300	Children	Classes, Workshops
Montshire Museum of Science Hanover, New Hampshire	Montshire Associates	Six programs a year on science and technology, includes dinner.	230	Other	Lectures, Demos
North Carolina Museum of Life & Science Durham, North Carolina	Nursing Home Outreach	Outreach science classes for senior centers and nursing homes.	120	Senior Citizens	Outreach
Ontario Science Centre Don Mills, Ontario, Canada	Ontario Science Centre Science School	One-semester enrichment course for students in last year of high school.	53	High School	Classes, Workshops
California Academy of Sciences San Francisco, California	Photo Contest for Young People	Photos are displayed, awards given.	1450	Elem thru Hi Sch	Special Events

161

**EDUCATIONAL PROGRAMS**  
**Reported in Science-Center Data Survey**

SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
Lakeview Museum of the Arts & Sciences Peoria, Illinois	Picture Person	Volunteers team how to give 20 minute art appreciation session in classroom.	30125	Elementary	Classes, Workshops
National Taiwan Science Education Centre Taipei, Taiwan, Rep. of China	Popular Science Lectures	Topics range from computer data processing to environmental protection.	30	All Ages/Gen Aud.	Lectures, Demos
Centre for Educational Museums Bangkok, Thailand	Preserved Food, Plant, Vegetables with Gamma Rays	Works closely with school system to supplement curriculum.	900	High School	Classes, Workshops
Thames Science Center New London, Connecticut	Project Porifera	In-depth summer institute in aquatic biology, support continued through school year.	0	Teachers	Teacher Training
Thames Science Center New London, Connecticut	Project RobotACTS	Slide presentation and demonstrations of personal robot and its sensors.	4537	Preschool-Gr. 12	Lectures, Demos
Thames Science Center New London, Connecticut	Project Thames!	Students are provided with workbook to tour exhibits, hands-on activities.	60	Elementary	Guided Tours
Lakeview Museum of the Arts & Sciences Peoria, Illinois	School Loan	More than 700 exhibits coordinated with classroom curriculum, some outreach.	30000	Preschool-Gr. 12	Outreach
North Carolina Museum of Life & Science Durham, North Carolina	School-Museum Explorations in Elementary Science	Hands-on classes, Starlab, outreach kits, scientist-in-residence, teacher inservice.	4320	Elementary	Classes, Workshops
Detroit Science Center Detroit, Michigan	Science "On the Road"	Outreach program of 4 assemblies and 4 classroom workshops.	31000	Elem thru Jr Hi	Outreach
National Taiwan Science Education Centre Taipei, Taiwan, Rep. of China	Science Tour Program	Monthly tour of museum includes geology, ecology, forestry, mining.	12	All Ages/Gen Aud.	Guided Tours
Reuben H. Fleet Science Center San Diego, California	Science for the Special Child	Science experiments for learning disabled youngsters, ages 5-15.	300	Disabled	Classes, Workshops

j 63

**EDUCATIONAL PROGRAMS**  
**Reported in Science-Center Data Survey**

SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
Impression 5 Science Museum Lansing, Michigan	Science on the Move	Collaborate with 3 local institutions to do annual science outreach.	500	All Ages/Gen Aud.	Outreach
Detroit Science Center Detroit, Michigan	Science under the Big Top	Summer day camp with hands-on science activities.	105	Elem thru Hi Sch	Classes, Workshops
Museum of Science and Industry Chicago, Illinois	Scientists and Schools	Scientists and engineers volunteer to assist teachers.	500	Elem thru Hi Sch	Classes, Workshops
Capital Children's Museum Washington, DC	Senior Citizen and Volunteer	Seniors receive training and support for serving in many capacities within museum.	100	Senior Citizens	Explainers
Museum of the Rockies Bozeman, Montana	Stone Procurement and Use by Stone-age Montanans	Research findings on mining techniques and tool dating.	80	All Ages/Gen Aud.	Lectures, Demos
Buhl Science Center Pittsburgh, Pennsylvania	Student Technology Conference	Students present their original research to audience.	200	Jr Hi thru Hi Sch	Lectures, Demos
Lakeview Museum of the Arts & Sciences Peoria, Illinois	Summer Circus	Teachers learn art and science activities for classroom use, work as volunteers.	1030	Teachers	Teacher Training
Reuben H. Fleet Science Center San Diego, California	Summer Space School	Mini-science workshops on astronomy, physics, chemistry, human body, computers.	1200	Elem thru Jr Hi	Classes, Workshops
Museum of Science and Industry Chicago, Illinois	Summer of Science	Three-day courses for teachers presented by nationally known educators.	100	Teachers	Teacher Training
New York Hall of Science Corona, New York	Teacher Associate	Teachers design pre- and post-visit activities for museum programs.	0	Teachers	Teacher Training
North Carolina Museum of Life & Science Durham, North Carolina	Teacher Internships	Teachers work on sabbatical and provide services to Durham teachers and students.	5	Teachers	Internships
Cleveland Children's Museum Cleveland, Ohio	Teacher Workshops	Child development, learning styles.	350	Teachers	Teacher Training

EDUCATIONAL PROGRAMS  
Reported in Science-Center Data Survey

SCIENCE CENTER	PROGRAM	DESCRIPTION	NUMBER SERVED	AUDIENCE	TYPE OF PROGRAM
The Science Museum of Minnesota St. Paul, Minnesota	Theatre as an Interpretive Technique in Museums	Short educational performances that enhance the visitor's museum experience.	0	All Ages/Gen Aud.	Performing Arts
McAllen International Museum McAllen, Texas	Tues. Afternoon Films About Art & Artists	Free films on art and artists for "Winter Texans."	280	Other	Films, Shows
Omniplex Science Museum Oklahoma City, Oklahoma	Visions of the Universe	Statewide art contest on astronomical fact and fantasy themes.	2050	Elem thru Hi Sch	Special Events
Discovery Museum Essex Junction, Vermont	Workshops	Arts and crafts, wildlife, learning kits.	900	All Ages/Gen Aud.	Classes, Workshops

JR6

JR7

**EDUCATIONAL PROGRAMS**  
**Reported in Science-Center Data Survey**

SCIENCE CENTER	PROGRAM	NUMBER SERVED	AUDIENCE
<b>PROGRAM TYPE: Camp-in (14)</b>			
New England Science Center	Boy Scout and Girl Scout Sleepovers	600	Elem thru Jt Hi
Ohio's Center of Science and Industry	COSI Camp-in	32,000	Females
Science Museum of Virginia	Camp-in	2,500	Females
Museum of Scientific Discovery	Camp-in	5,000	Elementary
Science Center of Iowa	Camp-in Program	1,183	All Ages/Gen Aud.
Museum of Science, Boston	Camp-ins	21,200	Elem thru Jr Hi
Vermont Institute of Natural Science	Ecology Overnights	150	Elementary
The Science Place	Exploring the Science Place (ESP)	7,000	Elem thru Jr Hi
North Carolina Museum of Life & Science	Girl Scout Camp-in	1,200	Females
Milwaukee Public Museum	Girl Scout Overnight/Collector's Corner	26	Other
The Chicago Academy of Sciences	Museum Overnights	200	Elementary
The Children's Museum, Indianapolis	Museum Overnites	75	Elementary
Singapore Science Centre	Singapore Youth Science Fortnight	100,000	Elem thru Hi Sch
Museum of History & Science	Snore with a Dinosaur	150	Families
<b>PROGRAM TYPE: Career Workshops (6)</b>			
Science Museum of Connecticut	CPEP (Connecticut Pre-engineering Program)	55	Mdl Sc/Jr Hi
Detroit Science Center	Careers in Science for Women	200	Females
Bell Museum of Natural History	Get Wise	4C	High School
Lawrence Hall of Science	MESA (Math, Engineering, Science Achievement)	7,828	Minorities
Red Mountain Museum	Science Career Day	100	Elem thru Hi Sch
Idaho Museum of Natural History	Senior High School Science Careers	3	High School
<b>PROGRAM TYPE: Classes, Workshops (163)</b>			
Impression 5 Science Museum	8th Grade Gifted & Talented Chemistry Program	64	Mdl Sc/Jr Hi
Science Museum of Connecticut	Across the Lines	100	Children
California Academy of Sciences	Activities Calendar	3,500	Adults-General
Science Discovery Center of Tompkins Co.	After School Program	0	Elementary
Discovery Hall	After-School Science	563	Elementary
Museum of History & Science	Aha Classes	321	Kindergarten
Lakeview Museum of the Arts & Sciences	Art & Science Classes	900	All Ages/Gen Aud.
The Science Museum of Minnesota	Arts and Science and/or Cultural Camps	500	Preschool-Gr. 12
National Taiwan Science Education Centre	Astronomy Instruction	101	Children

**EDUCATIONAL PROGRAMS**  
**Reported in Science-Center Data Survey**

SCIENCE CENTER	PROGRAM	NUMBER SERVED	AUDIENCE
Museum of Applied Arts and Sciences	Australian	0	All Ages/Gen Aud.
Bell Museum of Natural History	Avian Architecture	300	Elem thru Jr Hi
Brooklyn Children's Museum	Balance of Nature	4,800	Elem thru Hi Sch
Carter House Science Museum	Bigfoot/Littlefoot	30	Elem thru Hi Sch
The Health Adventure	Bones	4,703	All Ages/Gen Aud.
Museum of Applied Arts and Sciences	Boomerang Throwing Workshop	0	Elem thru Jr Hi
Deutsches Museum	Building Blocks	1,200	Preschool-Gr. 12
The Oakland Museum	California Water Gardens and Koi Ponds Seminar	200	Adults-General
Chicago Botanic Garden	Chicago Core Program	0	Elementary
Kansas Health Museum	Child Sexual Abuse	150	Other
Brooklyn Children's Museum	Collection Connection	2,560	Families
Louisiana Science Centre & IMAX Theatre	Computer Classes	1,000	All Ages/Gen Aud.
Museo Tecnologico De C.F.E.	Computer Workshop	720	Elem thru Jr Hi
Centre for Educational Museums	Computer for Education	3	High School
Museum of Science and Industry, Chicago	Computers and You	3,000	Elementary
Science World	Computers for Little People	500	Preschoolers
Cumberland Museum and Science Center	Cumberland Challenge	96	Children
The Health Adventure	Dental	4,244	Elementary
Museo Tecnologico De C.F.E.	Digital Logic	240	Elem thru Jr Hi
Red Mountain Museum	Dinosaur Program	6,000	Elementary
Springfield Science Museum	Dinosaurs	3,700	Elementary
Midland Center for the Arts	Discover Computers! Discover Legos!	12	Disabled
Discovery Hall	Discovery Camp	633	Elementary
Anniston Museum of Natural History	Discovery Days	75	Elem thru Jr Hi
St. Louis Science Center	Discovery Room	58,733	Elementary
The Oakland Museum	Docent/Advanced Docent Training Classes	120	Other
Virginia Living Museum	Early Birds	72	Preschoolers
Schiele Museum of Natural History	Earth/Life/Space Science	18,068	Elem thru Jr Hi
Insights--El Paso Science Center	El Paso Comm. Coll./Insights Summer Science Series	40	Elem thru Jr Hi
Orlando Science Center	Electro-ganza	5,745	Elem thru Hi Sch
Museum of History & Science	Elemental Explorations	120	Elem thru Jr Hi
Vermont Institute of Natural Science	ELF (Environmental Learning for the Future)	5,056	Other
Lawrence Hall of Science	Equals, Equals in Computer Technology, Family Math	7,975	Minorities
Idaho Museum of Natural History	Ethnographic Outreach	600	Elementary
National Taiwan Science Education Centre	Experiment on Biology	104	Mdl Sc/Jr Hi
Museum of Science and Industry	Explorations	5,500	Preschool-Gr. 12
Insights--El Paso Science Center	Explore New Horizons	24	Mdl Sc/Jr Hi

169

**EDUCATIONAL PROGRAMS**  
**Reported in Science-Center Data Survey**

SCIENCE CENTER	PROGRAM	NUMBER SERVED	AUDIENCE
The Children's Museum of Utah	Extra, Extra Write All about It	12	Elem thru Jr Hi
Museum of Applied Arts and Sciences	Fairlight CVI Workshop	0	Elem thru Hi Sch
Alfred P. Sloan Jr. Museum	Family Life/Human Reproduction	500	Families
Museum of Scientific Discovery	Fire Safety: "Get Out! Stay Out!"	2,435	Preschoolers
The Children's Museum of Utah	Food Chain Gang	300	Elem thru Jr Hi
The Children's Museum of Utah	Frozen Bubbles	50,000	All Ages/Gen Aud.
Indiana State Museum	Gaslight	200	Elem thru Jr Hi
The Academy of Natural Sciences	George Washington Carver Summer Scholars Program	16	Elem thru Hi Sch
Denver Museum of Natural History	Gifted & Talented Workshops	200	Elem thru Jr Hi
The Children's Museum	Gifted/Talented Programming	800	Elem thru Jr Hi
Brooklyn Children's Museum	Greenhouse Family Programs	8,000	Families
The Natural Science Center of Greensboro	Greensboro Public Schools (GPS) Contract	32,000	Elem thru Hi Sch
Cumberland Museum and Science Center	Growth and Development	875	All Ages/Gen Aud.
Deutsches Museum	Hands-on Experiments in Physics	0	High School
National Museum of Natural Science, Taichung	Hands-on Science	920	Elementary
Capital Children's Museum	Hasbro Project	0	Disabled
The Franklin Institute Science Museum	Headstart Program - "Keyboards for Kids"	1,920	Low Income
National Museum of Natural Science, Taichung	Health Activities Project	800	Elem thru Jr Hi
Cumberland Museum and Science Center	Health Hall	3,800	Elem thru Jr Hi
Denver Museum of Natural History	Healthy Heart	4,150	All Ages/Gen Aud.
South Florida Science Museum	Holiday Camps	120	Elementary
Kansas Health Museum	Human Growth & Development	4,000	Elem thru Jr Hi
Pacific Science Center	In-house Offerings (demos, exhibits, guided activities)	88,981	Elem thru Hi Sch
Idaho Museum of Natural History	Junior Science Academy	115	Elementary
Kalamazoo Public Museum	Kalamazoo Skyline	3,200	All Ages/Gen Aud.
The Franklin Institute Science Museum	Kids 3-6	2,984	Preschoolers
Museum of Science, Miami	Kids N' Bits	50	Kindergarten
Cranbrook Institute of Science	Kindergarten Program	1,100	Elementary
Science Center of Iowa	King/Perkins Science Magnet School Project	590	Elementary
Impression 5 Science Museum	L.A.B.S. Chemistry Program	50	Elem thru Jr Hi
The Health Adventure	Life Patterns	3,086	All Ages/Gen Aud.
Orlando Science Center	Lights and Lenses	9,589	Elem thru Hi Sch
Capital Children's Museum	MET-Kids	300	Children
Indiana State Museum	Magnificent Urban Voyaging	270	Elementary
Missouri Botanical Garden	Master Gardeners	5,000	Other
Florida Hall as City Museum	Mentor Program	30	Elementary
	Mission Discovery	500	Elementary

**EDUCATIONAL PROGRAMS**  
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SCIENCE CENTER	PROGRAM	NUMBER SERVED	AUDIENCE
Impression 5 Science Museum	Museum Chemistry Class	80	Elementary
The Science Place	Museum Enrichment Program	250	Preschoolers
Centre for Educational Museums, Bangkok	Nervous System	9	High School
The Health Adventure	Nutrition	3,794	All Ages/Gen Aud.
Insights--El Paso Science Center	Nuts 'n' Bolts of Science Fair Projects	37	Elem thru Jr Hi
Cranbrook Institute of Science	One-Day Program	2,000	Elem thru Jr Hi
Ontario Science Centre	Ontario Science Centre Science School	53	High School
Ontario Science Centre	Oscott	2,000	Preschool-Gr. 12
St. Louis Science Center	Our Place in the Universe	360	Minorities
Museum of Scientific Discovery	P.A.C.T. (Parents and Children Together`	225	Preschoolers
Jacksonville Museum of Arts & Science	Parent's Morning Out/Children's Workshop	100	Children
Centre for Educational Museums, Bangkok	Petroleum	7	High School
Lakeview Museum of the Arts & Sciences	Picture Person	30,125	Elementary
Kalamazoo Public Museum	Preschoolers at the Museum	1,100	Preschoolers
Centre for Educational Museums	Preserved Food, Plant, Vegetables with Gamma Rays	900	High School
The Technology Center of Silicon Valley	Project Mindstorm	31	Elementary
Lawrence Hall of Science	Public Educational Programs	250,000	All Ages/Gen Aud.
Oregon Museum of Science & Industry	Public Labs in the Museum	4,000	All Ages/Gen Aud.
Springfield Science Museum	Reptiles	3,500	Elementary
Orlando Science Center	Reptiles and Amphibians of Florida	0	Elementary
Museo Tecnologico De C.F.E.	Robotics	250	Elem thru Jr Hi
Centre for Educational Museums, Bangkok	Rocks and Minerals	2	High School
Museum of Science, Boston	Saturday Education Courses Program	785	Elem thru Jr Hi
Museum of Science, Boston	School Visits Program	232,000	Elem thru Hi Sch
South Florida Science Museum	School Exploring Science	500	Elementary
North Carolina Museum of Life & Science	School-Museum Explorations in Elementary Science	4,320	Elementary
Santa Barbara Museum Of Natural History	Science Adventures - Classes in Natural History	500	All Ages/Gen Aud.
Pacific Science Center	Science Celebration	6,600	Preschool-Gr. 12
Science Center of Iowa	Science Center Preschool	72	Preschoolers
Impression 5 Science Museum	Science Initiatives '87	2,000	Elementary
Nehru Science Centre	Science Quiz Contests	400	High School
New England Science Center	Science Sleuth	300	Females
National Taiwan Science Education Centre	Science Study Programs	25	Children
The Discovery Center, Syracuse	Science Workshops	1,080	Elementary
Science Discovery Center of Tompkins Co.	Science and Art for Preschool	125	Preschoolers
Cranbrook Institute of Science	Science at Cranbrook	1,300	Elementary
Ontario Science Centre	Science for Seniors	200	Senior Citizens

**EDUCATIONAL PROGRAMS**  
**Reported in Science-Center Data Survey**

SCIENCE CENTER	PROGRAM	NUMBER SERVED	AUDIENCE
Reuben H. Fleet Science Center	Science for the Special Child	300	Disabled
Detroit Science Center	Science under the Big Top	105	Elem thru Hi Sch
Fernbank Science Center	Scientific Tools and Techniques	180	High School
Museum of Science and Industry, Chicago	Scientists and Schools	500	Elem thru Hi Sch
The Space Center	Shuttle Camp 2001	140	Elem thru Jr Hi
Nehru Science Centre	Sky Observation Programs	0	All Ages/Gen Aud.
South Florida Science Museum	Small Fry Science	150	Preschoolers
The Academy of Natural Sciences	Smith-Kline Beckman's Summer "Potentials" Program	28	High School
Springfield Science Museum	Solar System	20,000	Elem thru Hi Sch
Springfield Science Museum	Sounds Like Fun	15,000	Elem thru Hi Sch
Louisiana Science Centre & IMAX Theatre	Space Camp	500	Elem thru Jr Hi
Nagoya Municipal Science Museum	Special Exhibition	24,000	All Ages/Gen Aud.
Museum of Art, Science & Industry	Special Needs Adapted Photography	0	Disabled
Museum of Science, Miami	Spring Fling	70	Preschool-Gr. 12
The Children's Museum, Boston	Staff Training for Community Agencies	320	Low Income
Nehru Science Centre	Students' Science Seminar	0	Elem thru Hi Sch
The Discovery Museums	Summer Discoveries	40	Elementary
Carter House Science Museum	Summer Naturalist Program	250	Elementary
The Oakland Museum	Summer Science Camp	32	Elem thru Jr Hi
Museum of Science, Miami	Summer Science Camps	1,200	Preschool-Gr. 12
Carter House Science Museum	Summer Science Classes	75	Elem thru Jr Hi
Nature Science Center	Summer Science Day Camp	100	Elementary
Cumberland Museum and Science Center	Summer Science Day Camps	700	Elem thru Jr Hi
The Discovery Center, Fresno	Summer Science Workshops	427	Preschool-Gr. 12
Reuben H. Fleet Science Center	Summer Space School	1,200	Elem thru Jr Hi
Ohio's Center of Science and Industry	Summer Workshops	0	Children
Denver Museum of Natural History	Summer Workshops	451	Elem thru Jr Hi
The Science Place	Summersearch	1,100	Preschool-Gr. 12
Museum of Scientific Discovery	Super Science Summer	1,600	Preschool-Gr. 12
Kansas Health Museum	Survey of Body Systems	2,500	Elem thru Jr Hi
Denver Museum of Natural History	Teen Sexuality	3,172	Jr Hi thru Hi Sch
Deutsches Museum	Textile Technology	600	Mdl Sc/Jr Hi
Science Center of New Hampshire	The World of Life: the Biosphere	20	Grad Stdnts
Nehru Science Centre	Vacation Science Laboratory Classes	500	High School
South Florida Science Museum	Wee Wonders	120	Kindergarten
Museum of Natural History	Weekend Workshops	822	All Ages/Gen Aud.
The Children's Museum of Houston	Weeklong Science Camp	60	Elem thru Jr Hi

**EDUCATIONAL PROGRAMS**  
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SCIENCE CENTER	PROGRAM	NUMBER SERVED	AUDIENCE
Kansas Health Museum	Wellness	1,500	Other
The Academy of Natural Sciences	Women in Natural Sciences (WINS)	23	Females
Discovery Museum	Workshops	900	All Ages/Gen Aud.
Science Museum of Virginia	Workshops, Classes, Specia. Programs	600	All Ages/Gen Aud.
Ohio's Center of Science and Industry	Young Experimental Scientist (YES)	3,500	Other
Carter House Science Museum	Zoomobile	3,000	Elem thru Jr Hi
PROGRAM TYPE: Explainers (5)			
California Academy of Sciences	"Ask Me" Team	10	High School
Missouri Botanical Garden	Eco-Act	17,461	High School
New York Hall of Science	Explainer	50	College
Museum of Science & Industry, Tampa	Explainer Program	15	High School
Capital Children's Museum	Senior Citizen and Volunteer	100	Senior Citizens
PROGRAM TYPE: Field Trips, Studies (19)			
Milwaukee Public Museum	Archaeological Rescue	200	Other
Anniston Museum of Natural History	Bahama Study Trip	20	Adults-General
Oregon Museum of Science & Industry	Camp Programs	1,500	Families
The Chicago Academy of Sciences	Ecological Citizenship	1,600	Elem thru Jr Hi
Pacific Science Center	Field Studies/Camps	2,890	Elem thru Hi Sch
National Museum of Natural Science, Taichung	Field Trip - Bird Watching	240	All Ages/Gen Aud.
Science Museum of Virginia	Field Trips, Expeditions	450	All Ages/Gen Aud.
Science Center of New Hampshire	Floating Classroom - Limnology	500	Jr Hi thru Hi Sch
Indiana State Museum	Fowl Play	900	Elementary
California Academy of Sciences	Junior Academy	2,200	Elem thru Hi Sch
Museum of the Rockies	Natural History Field Course for Kids	32	Elem thru Jr Hi
Science Center of New Hampshire	Plant and Animal Communities	200	Elementary
Virginia Living Museum	Science Safaris	275	High School
New Jersey State Museum	South Dakota Field Experience	0	College
Georgia Southern Museum	Summer Adventure Camp	75	High School
Virginia Living Museum	Summer Field Schools	50	Mdl Sc/Jr Hi
Red Mountain Museum	Summer Paleontological Digs	100	Adults-General
Museum of Natural History	Summer Workshops for Young People	682	Elem thru Jr Hi
The Chicago Academy of Sciences	Tandem Tours: CAS and CHS	250	Jr Hi thru Hi Sch

**EDUCATIONAL PROGRAMS**  
**Reported in Science-Center Data Survey**

SCIENCE CENTER	PROGRAM	NUMBER SERVED	AUDIENCE
<b>PROGRAM TYPE: Films, Shows (4)</b>			
McAllen International Museum	Charles Franteras Film/Discussion Series	815	All Ages/Gen Aud.
Nehru Science Centre	Science Film Festivals	0	Elem thru Hi Sch
Nagoya Municipal Science Museum	Scientific Film Show	2,947	All Ages/Gen Aud.
McAllen International Museum	Thurs. Afternoon Films About Art & Artists	280	Other
<b>PROGRAM TYPE: Guided Tours (33)</b>			
Brooklyn Children's Museum	After-School Adventure	640	Other
The Oakland Museum	Art and Animals	851	Preschoolers
New England Science Center	Birthday Party	90	Preschool-Gr. 12
Museum of Art, Science & Industry	Bridgeport Schools - Science Teacher Orientation	165	Teachers
Schiele Museum of Natural History	Catawba History Study Tour	2,771	All Ages/Gen Aud.
The Science Place	China School Tours	52,000	Elem thru Hi Sch
National Air & Space Museum	Daily Tours of the Museum	23,179	Elem thru Hi Sch
Santa Barbara Museum Of Natural History	Discovery Lab	8,000	All Ages/Gen Aud.
Cranbrook Institute of Science	Discovery Room	7,000	Families
Santa Barbara Museum Of Natural History	Docent-Guided Tours	8,000	Elementary
The Oakland Museum	Docent-Led Natural Science Gallery Tours	13,004	Other
The Franklin Institute Science Museum	Energy f - the Fifth Grade	19,000	Elementary
Museum of History & Science	Falls of Ohio: Our Special Site	4,489	Elem thru Jr Hi
Schenectady Museum and Planetarium	Family Adventures	165	Families
Exploratorium	Field Trip Pathways	20,000	Elem thru Jr Hi
The Children's Museum of Houston	Focus Tours	0	Elementary
Alfred P. Sloan Jr. Museum	General Health Tour	4,000	Elem thru Hi Sch
Alfred P. Sloan Jr. Museum	General Museum Tours	30,000	Elem thru Hi Sch
The Chicago Academy of Sciences	Group Programs	20,000	Preschool-Gr. 12
Discovery Museum	Group Visits	16,000	Preschool-Gr. 12
Springfield Science Museum	Guided Tour	20,000	Elem thru Hi Sch
Alfred P. Sloan Jr. Museum	Mastodons & Mammoths	1,000	Elem thru Hi Sch
Reuben H. Fleet Science Center	Palomar Observatory Behind-the-Scenes Tours	270	All Ages/Gen Aud.
The Kansas City Museum	Please Touch	1,300	Elementary
National Air & Space Museum	Programs for Disabled Visitors	0	Disabled
Thames Science Center	Project Thames!	60	Elementary
Deutsches Museum	Research Games	7,200	Elem thru Jr Hi
Insights--El Paso Science Center	Scheduled Group Visits to Museum	6,415	Preschool-Gr. 12

**EDUCATIONAL PROGRAMS**  
**Reported in Science-Center Data Survey**

SCIENCE CENTER	PROGRAM	NUMBER SERVED	AUDIENCE
The Discovery Center	School Visit Program	14,000	Preschool-Gr. 12
Science Station	School Visit Program - Electromagnetism	0	Elementary
National Taiwan Science Education Centre	Science Tour Program	12	All Ages/Gen Aud.
The Health Adventure	Senses	4,758	All Ages/Gen Aud.
Sacramento Science Center & Junior Museum	Tours	12,000	Elem thru Hi Sch

**PROGRAM TYPE: Internships (10)**

Fernbank Science Center	Independent Study/Student Research	50	High School
Science Center of New Hampshire	Intern Program	8	College
Lawrence Hall of Science	Math Science Technology Institute (MSTI)	200	Teachers
The Natural Science Center of Greensboro	Museum Apprenticeship	5	College
Omniplex Science Museum	Omniplex Museum Apprentice Program	26	High School
Sacramento Science Center & Junior Museum	STEAM Internship	6	Teachers
Chicago Botanic Garden	Student Internships	10,907	College
North Carolina Museum of Life & Science	Teacher Internships	5	Teachers
The Children's Museum, Indianapolis	University Student Practicums	15	Teachers
Jacksonville Museum of Arts & Science	Youth Internships	60	Jr Hi thru Hi Sch

**PROGRAM TYPE: Lectures, Demos (35)**

California Academy of Sciences	Biology Forum	150	Teachers
Reuben H. Fleet Science Center	Bubble Wonders!	12,000	Elementary
Museum of History & Science	Celebrations	600	Jr Hi thru Hi Sch
California Museum of Science & Industry	Computer Artist Demonstrations	15,000	All Ages/Gen Aud.
Bell Museum of Natural History	Critters a La Cart	5,000	All Ages/Gen Aud.
Detroit Science Center	Demonstration Theatre	100,000	All Ages/Gen Aud.
Nagoya Municipal Science Museum	Demonstration on the Exhibition Floors	92,000	All Ages/Gen Aud.
Science Museum of Virginia	Demonstrations	0	All Ages/Gen Aud.
National Museum of American History	Discovery Room	0	Children
Red Mountain Museum	Earth Science School Programs	4,000	Elem thru Jr Hi
National Museum of Natural Science, Taichung	Electric Charge	0	All Ages/Gen Aud.
Oregon Museum of Science & Industry	Exhibit Enhancement thru Programs	500,000	All Ages/Gen Aud.
Discovery Museum	Family Programs	200	Families
Museum of Science, Miami	Fifth Grade Science Education Program	7,000	Elementary
Science Museum of Virginia	Fun with Physics Program	2,112	Elem thru Hi Sch
Midland Center for the Arts	Hands On! Minds On!	48	Elementary

**EDUCATIONAL PROGRAMS**  
**Reported in Science-Center Data Survey**

SCIENCE CENTER	PROGRAM	NUMBER SERVED	AUDIENCE
Science Center of Iowa	In-center Demonstration Program	57,941	All Ages/Gen Aud.
The Science Museum of Minnesota	Informal Program/Activities on Exhibit Floors	0	All Ages/Gen Aud.
Museo Tecnologico De C.F.E.	Lectures Sundays Science	13,800	All Ages/Gen Aud.
Montshire Museum of Science	Montshire Associates	230	Other
Science Center of New Hampshire	New Hampshire Mammals	800	Elem thru Jr Hi
Orlando Science Center	Organs of the Human Body	8,932	Elementary
National Taiwan Science Education Centre	Popular Science Lectures	30	All Ages/Gen Aud.
Thames Science Center	Project RobotACTS	4,537	Preschool-Gr. 12
Museum of Science, Boston	Public Demos, Interpretations & Discovery Spaces	1,000,000	All Ages/Gen Aud.
The Franklin Institute Science Museum	Science Auditorium Shows	70,000	All Ages/Gen Aud.
Ontario Science Centre	Science behind Headlines	2,000	All Ages/Gen Aud.
South Florida Science Museum	Senior Citizen's Science Seminars	500	Senior Citizens
Catawba Science Center	Spotlight on Science	320	All Ages/Gen Aud.
Museum of the Rockies	Stone Procurement and Use by Stone-age Montanans	80	All Ages/Gen Aud.
Buhl Science Center	Student Technology Conference	200	Jr Hi thru Hi Sch
New Jersey State Museum	Sunday Science Lecture Series	1,300	All Ages/Gen Aud.
Orlando Science Center	The Force that's with You	5,333	Jr Hi thru Hi Sch
Memphis Pink Palace Museum & Planetarium	Theater of Science "The Great Electricity Show"	7,000	All Ages/Gen Aud.
Nature Science Center	(Untitled)	48,518	All Ages/Gen Aud.

**PROGRAM TYPE: Outreach (39)**

Oregon Museum of Science & Industry	After School Programs in Community	400	Elem thru Jr Hi
The Discovery Museums	Body Music	300	Preschoolers
Ohio's Center of Science and Industry	COSI on Wheels	80,000	Other
Bell Museum of Natural History	Children's Hospital Programs	160	Children
Indiana State Museum	Covered Wagon	6,000	Elementary
Milwaukee Public Museum	Discovery Units	50,000	All Ages/Gen Aud.
Midland Center for the Arts	Discovery! in a Suitcase	60	Children
Catawba Science Center	Educational Outreach	12,246	Elem thru Hi Sch
Museum of Science, Boston	Elementary Science Outreach Programs	800	Teachers
St. Louis Science Center	Encouraging Energy Education Mini-grant Program	18	Teachers
Louisiana Science Centre & IMAX Theatre	Energy Source	0	Elem thru Jr Hi
Lawrence Hall of Science	GEMS (Great Explorations in Math and Science)	5,000	Teachers
Missouri Botanical Garden	Horticultural Answer Service	20,000	Other
Virginia Living Museum	In-school Programs	25,000	Elementary
Museum of Natural History, Lawrence	Loan Kits	27,090	All Ages/Gen Aud.

**EDUCATIONAL PROGRAMS**  
**Reported in Science-Center Data Survey**

SCIENCE CENTER	PROGRAM	NUMBER SERVED	AUDIENCE
Discovery Museum	Loan Kits-Curriculum Aids	6,000	Preschool-Gr. 12
Jacksonville Museum of Arts & Science	M.U.S.E. Boxes (Museum Units Supplementing Educ.)	50,000	Elementary
North Carolina Museum of Life & Science	Nursing Home Outreach	120	Senior Citizens
The Science Museum of Minnesota	OIS (Opportunities in Science)	10,000	Jr Hi thru Hi Sch
Buhl Science Center	Outreach	20,000	All Ages/Gen Aud.
Jacksonville Museum of Arts & Science	Outreach '87	16,600	Elem thru Jr Hi
Science Center of Iowa	Outreach Demonstration Program	8,068	Elem thru Hi Sch
Denver Museum of Natural History	Outreach Programs	19,977	Preschool-Gr. 12
St. Louis Science Center	Project: Pulsar Curriculum Kits	2,139	Teachers
National Air & Space Museum	Public Inquiry Mail	2,133	All Ages/Gen Aud.
Indiana State Museum	Reach Bus	9,000	Elem thru Hi Sch
Lakeview Museum of the Arts & Sciences	School Loan	30,000	Preschool-Gr. 12
Detroit Science Center	Science "On the Road"	31,000	Elem thru Jr Hi
Eastern Washington Science Center	Science Center Outreach Program	5,000	Elementary
Science World	Science Roadshows	26,000	Elem thru Hi Sch
Impression 5 Science Museum	Science on the Move	500	All Ages/Gen Aud.
Missouri Botanical Garden	Suitcase Science	4,213	Teachers
Sacramento Science Center & Junior Museum	TOPS (Traveling One Person Show.)	36,000	Elem thru Hi Sch
The Space Center	Teacher Newsletter	100	Teachers
Vermont Institute of Natural Science	Touring Natural History Programs	14,389	All Ages/Gen Aud.
The Franklin Institute Science Museum	Traveling Science Shows	330,000	All Ages/Gen Aud.
Anniston Museum of Natural History	Traveling Trunk Program	3,000	Elem thru Hi Sch
Insights--El Paso Science Center	Van-in-Sight	14,377	All Ages/Gen Aud.
Bell Museum of Natural History	Wildlife Information Service	3,181	All Ages/Gen Aud.

PROGRAM TYPE: Performing Arts (7)

California Museum of Science & Industry	Calif Science Theater Company	35,000	Elem thru Hi Sch
New Jersey State Museum	Dino-Safari...Especially for Kids	950	Families
Schiele Museum of Natural History	Earthmagic - Week of the Young Earthling	2,200	Elementary
Chicago Botanic Garden	Heritage Garden Interpretation	5,595	All Ages/Gen Aud.
Schiele Museum of Natural History	Pioneer Lifestyle Experience	7,500	All Ages/Gen Aud.
Memphis Pink Palace Museum & Planetarium	Puppets- "Animal Crackers" & "The Dinah Saur Show"	20,000	Elementary
The Science Museum of Minnesota	Theatre as an Interpretive Technique in Museums	0	All Ages/Gen Aud.

**EDUCATIONAL PROGRAMS**  
**Reported in Science-Center Data Survey**

SCIENCE CENTER	PROGRAM	NUMBER SERVED	AUDIENCE
<b>PROGRAM TYPE: Planetarium (8)</b>			
The Kansas City Museum	"Wonders of the Night Sky" Planetarium Program	324	Preschoolers
Lakeview Museum of the Arts & Sciences	A Parental Involvement Program in Elementary Astronomy	220	Families
Pacific Science Center	Comet on Wheels	100,000	High School
Kalamazoo Public Museum	Exploring the Solar System	2,835	Elementary
Nagoya Municipal Science Museum	Planetarium Program	349,585	All Ages/Gen Aud.
Alberta Science Centre/Centennial Planetarium	Planetarium School Show Evaluation and Revision	20,000	Teachers
Museum of the Rockies	Starlab Planetarium	2,500	All Ages/Gen Aud.
New York Hall of Science	Starlab Rental	100,200	Teachers
<b>PROGRAM TYPE: Radio, TV (2)</b>			
Vermont Institute of Natural Science	Monthly Half-hour Radio Programs	0	All Ages/Gen Aud.
The Natural Science Center of Greensboro	Morning Television Programs	9,360,000	All Ages/Gen Aud.
<b>PROGRAM TYPE: Science Clubs (5)</b>			
Oregon Museum of Science & Industry	Ask Center/Neighborhood Science Class	150	Children
Museum of Science and Industry	Science Club	75	Jr Hi thru Hi Sch
Discovery Hall	Special Interest Groups	20	Other
Nagoya Municipal Science Museum	The Club of Science Museum	2,944	Elem thru Jr Hi
Buhl Science Center	Young Astronauts	60	High School
<b>PROGRAM TYPE: Special Events (28)</b>			
Cumberland Museum and Science Center	Air & Flight Event Weekend	900	Families
Red Mountain Museum	Annual Alabama Indian Festival	1,500	Families
Milwaukee Public Museum	Arbor Day Intergenerational Program	50	Other
Buhl Science Center	Buhl Invention Convention	120	Elem thru Hi Sch
California Museum of Science & Industry	California State Science Fair	875	Teachers
Schiele Museum of Natural History	Carolina Fossil Fair	6,000	All Ages/Gen Aud.
Museum of the Rockies	Children's Science Book and Equipment Fair	600	Other
The Children's Museum, Indianapolis	Cultural Focus Days	5,000	All Ages/Gen Aud.
Alfred P. Sloan Jr. Museum	Dinosaur Days	87,000	All Ages/Gen Aud.
Milwaukee Public Museum	Egg Hunt	300	Families
The Discovery Center, Syracuse	Evening under the Stars	700	All Ages/Gen Aud.

**EDUCATIONAL PROGRAMS**  
**Reported in Science-Center Data Survey**

SCIENCE CENTER	PROGRAM	NUMBER SERVED	AUDIENCE
St. Louis Science Center	Festival of Flight	2,055	All Ages/Gen Aud.
Eastern Washington Science Center	Friday Afternoon Special Programs	300	All Ages/Gen Aud.
The Science Museum of Minnesota	Inventors' Fair	107	Elem thru Jr Hi
Brooklyn Children's Museum	Joining Julian	360	Families
Science Museum of Virginia	Joy from the World	22,000	All Ages/Gen Aud.
Carter House Science Museum	Northern Calif Science Fair	400	Elem thru Hi Sch
California Academy of Sciences	Photo Contest for Young People	1,450	Elem thru Hi Sch
Science Station	Science Fair Mentor Program	10	Jr Hi thru Hi Sch
Museum of Science & Industry, Tampa	Science Olympics	1,500	Elem thru Jr Hi
Buhl Science Center	Science and Engineering Fair	450	Jr Hi thru Hi Sch
Anniston Museum of Natural History	Solar Eclipse Party	100	High School
New Jersey State Museum	Space Day	2,500	All Ages/Gen Aud.
Reuben H. Fleet Science Center	Spaceweek Symposium	1,690	Adults-General
New Jersey State Museum	Super Science Weekend	5,000	All Ages/Gen Aud.
The Children's Museum of Houston	Teacher's Night	360	Teachers
Singapore Science Centre	Technology Fair	15,000	College
Omniplex Science Museum	Visions of the Universe	2,050	Elem thru Hi Sch

PROGRAM TYPE: Teacher Training (39)

Don Harrington Discovery Center	Astronomy for Elementary Teachers	20	Teachers
Science Museums of Charlotte	By Gosh It Works!	125	Teachers
Missouri Botanical Garden	Chautauqua Short Course for Teachers of Science	30	Teachers
The Children's Museum, Boston	Designing Playful Educational Experiences	8	Teachers
Exploratorium	Exploratorium Teacher Institute	300	Teachers
Virginia Living Museum	Field Zoology	21	Teachers
Chicago Botanic Garden	Graduate Teacher Education Courses	25	Teachers
Kansas Health Museum	Human Growth & Development	75	Teachers
Omniplex Science Museum	Inservice Workshops	631	Teachers
Ontario Science Centre	Intermediate Science for Teachers	28	Teachers
Omniplex Science Museum	Omniplex Museum Adventures	21,484	Teachers
Dutch Institute for Industry & Technology	PC Workshop	200	Teachers
The Children's Museum, Indianapolis	Preschool Teacher Workshops	300	Teachers
Thames Science Center	Project Porisera	0	Teachers
Thames Science Center	Project Scienceskills	19	Teachers
Vermont Institute of Natural Science	Residential Teacher Workshops	30	Teachers
Exploratorium	School in the Exploratorium (SITE)	100	Teachers

**EDUCATIONAL PROGRAMS**  
**Reported in Science-Center Data Survey**

SCIENCE CENTER	PROGRAM	NUMBER SERVED	AUDIENCE
National Air & Space Museum	Science Teacher Education Workshops	0	Teachers
Catawba Science Center	Science Teacher Workshops	76	Teachers
The Children's Museum, Boston	Science for After-School Teachers	20	Teachers
Science World	Science on a Shoestring	200	Teachers
Sacramento Science Center & Junior Museum	SMART (Scientific Methods and Resources Training)	200	Teachers
California Museum of Science & Industry	Space-Science Teacher Workshop	80	Teachers
Sacramento Science Center & Junior Museum	STEAM Inservice	112	Teachers
Lakeview Museum of the Arts & Sciences	Summer Circus	1,030	Teachers
Museum of Science and Industry, Chicago	Summer of Science	100	Teachers
New York Hall of Science	Teacher Associate	0	Teachers
Cranbrook Institute of Science	Teacher In-science	300	Teachers
The Children's Museum, Boston	Teacher Seminars	253	Teachers
Museum of Scientific Discovery	Teacher Training	250	Teachers
Museum of Science & Industry, Tampa	Teacher Training Workshops	120	Teachers
The Discovery Museums	Teacher Workshops	25	Teachers
Discovery Hall	Teacher Workshops	300	Teachers
Museum of Natural History, Lawrence	Teacher Workshops	231	Teachers
Cleveland Children's Museum	Teacher Workshops	350	Teachers
Jacksonville Museum of Arts & Science	Teaching within the Museum Environment	100	Teachers
Louisiana Science Centre & IMAX Theatre	TIME (Techniques in Math Education)	100	Teachers
Louisiana Science Centre & IMAX Theatre	TIPS (Techniques in Participatory Science)	100	Teachers
Eastern Washington Science Center	Workshop for Primary Grade Teachers	25	Teachers

PROGRAM TYPE: Tours, Travel Programs (1)

Kalamazoo Public Museum	Walking Tours	150	All Ages/Gen Aud.
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## ASTC Science Center Survey

### Index

Archaeology .....	40
ASTRONOMY .....	19
BIOLOGY/ECOLOGY .....	33
BIOLOGY/ZOOLOGY .....	37
BIOLOGY/EVOLUTION .....	33
BIOLOGY/BOTANY .....	36
BIOLOGY (See also NATURAL HISTORY, LIFE SCIENCES) .....	32
CAREERS IN SCIENCE .....	53
CHEMISTRY .....	18
Dental Health .....	44
Dinosaurs .....	28
EARTH SCIENCES/GEOLOGY (See also TECHNOLOGY/ENERGY, POWER PRODUCTION) .....	26
EARTH SCIENCES/GEOGRAPHY .....	27
EARTH SCIENCES/PALeONTOLOGY .....	28
EARTH SCIENCES/METEOROLOGY .....	26
EARTH SCIENCES .....	25
EDUCATION .....	48
Fitness, Personal Health .....	43
FOOD, AGRICULTURE, FORESTRY .....	46
GENERAL SCIENCE .....	1

GENERAL PHYSICS .....	11
Heart, Cardiovascular System .....	46
Human Evolution .....	40
Live Animals .....	38
MATHEMATICS .....	10
MEDICINE AND HEALTH .....	42
MEDICINE/SYSTEMS OF THE BODY .....	44
NATURAL HISTORY, LIFE SCIENCES (See also BIOLOGY) .....	29
Nutrition .....	44
OTHER .....	53
PHYSICS/FLUID MECHANICS .....	15
PHYSICS/ELECTRICITY AND MAGNETISM (See also TECHNOLOGY/ENERGY) .....	17
PHYSICS/MECHANICS .....	15
PHYSICS/OPTICS (See also SOCIAL SCIENCES/PSYCHOLOGY) .....	16
PHYSICS/HEAT, THERMODYNAMICS .....	16
PHYSICS/ACOUSTICS .....	15
SCIENTIFIC METHOD AND PROCESS .....	51
SOCIAL SCIENCES/HISTORY, MISCELLANEOUS .....	41
SOCIAL SCIENCES/PSYCHOLOGY (See also PHYSICS/OPTICS) .....	41
SOCIAL SCIENCES/ANTHROPOLOGY .....	38
Solar System .....	23
Space Research and Exploration .....	21
Stars and Star Clusters .....	24

TECHNOLOGY/LASERS (See also Holograms) .....	48
TECHNOLOGY/COMPUTERS .....	47
TECHNOLOGY/CIVIL ENGINEERING, ARCHITECTURE .....	46
TECHNOLOGY/ENERGY, POWER PRODUCTION (See also PHYSICS/ELECTRICITY; EARTH SCIENCES) .	46
TECHNOLOGY/MATERIALS AND PROCESSES .....	47
TECHNOLOGY/COMMUNICATIONS .....	47
TECHNOLOGY .....	46



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